IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

)
)
Civil Action No. 1:14-cv-02014-JEB
)))
)
)
)

SECOND DECLARATION OF ABBY COHEN SMUTNY

EXHIBIT 24

In the Matter of an Arbitration Under the Additional Facility Rules of the International Centre for the Settlement of Investment Disputes

CASE No. ARB (AF)/09/01

Between

GOLD RESERVE INC., Claimant,

v.

THE BOLIVARIAN REPUBLIC OF VENEZUELA, Respondent

EXPERT REPORT OF BRENT C. KACZMAREK, CFA

NAVIGANT CONSULTING, INC. 1801 K STREET NW, SUITE 500 WASHINGTON, DC 20006 24 SEPTEMBER 2010 Venezuela revoked Claimant's Authorization to Affect Natural Resources for Phase I of construction for the Brisas Property. Accordingly, we have been asked to determine the fair market value of the Brisas Project as of 14 April 2008 under the assumption that the Authorization to Affect would not have been revoked, but rather that the Brisas Project would have been granted all permissions to proceed. Additionally, we have been asked to determine the fair market value of the rights to develop the Choco 5 Property as of 14 April 2008 as well and to bring both valuations to present value at an appropriate interest rate.

- 4. In the process of preparing this report we have relied upon publicly available documents as well as documents requested from and provided by Claimant. Some of the documents I have received in this matter were originally prepared in Spanish. I do not speak or write in Spanish. Therefore, where necessary, I have relied upon translations of these documents provided by Counsel and by members of my team who are fluent in Spanish. The list of documents we have relied upon in preparing this report is provided as Appendix 2 to this report.
- 5. In the preparation of this report we have consulted with Roscoe Postle Associates Inc. ("RPA"). RPA is a subsidiary of the Scott Wilson Group plc, a global design and engineering consultancy. RPA provides geological and mining consulting expertise worldwide. We have relied upon RPA for certain technical and mining industry matters in preparing this report.
- 6. I, Brent C. Kaczmarek, am a Managing Director in the Washington, DC office of Navigant Consulting, Inc. I have been retained as a financial, valuation, and damages expert in more than 50 international arbitrations including more than 40 investor-state arbitrations. In my role as a financial expert in these investor-state arbitrations, I have provided opinions for both investors and states. I hold the designation of Chartered Financial Analyst, a globally recognized designation held by professionals demonstrating competence in the investment valuation and decision-making process. I received this designation in 1998 from the Association for Investment Management and Research (now CFA Institute), the governing body of charter-holders. There are charter-holders and charter-holder candidates residing in more than 160 countries worldwide. My curriculum vitae is included as Appendix 1 to this report.

II. Executive Summary

7. Claimant's losses are equivalent to the value of the Brisas Project and the Choco 5 Property as of 14 April 2008 plus interest from that date to compensate Claimant for the time value and opportunity cost of money. We measured the value of the Brisas Project under the fair market value standard utilizing three standard valuation approaches: 1) the Discounted Cash Flow ("DCF") Approach, 2) the Comparable Publicly Traded Company Approach, and 3) the Comparable Transaction Approach. Based on our three

valuation approaches, we determined that the fair market value of the Brisas Project as of 14 April 2008 was US\$ 1.668 billion as detailed in Table 1 below.

Table 1 – Weighting of Valuation Approaches and Valuation Conclusion for the Brisas Project

Valuation Approach	Weighting	Enterprise Value (US\$s)
DCF	50%	1,650,559,000
Comparable Public Companies	35%	1,652,918,000
Comparable Transactions	15%	1,760,866,000

Weighted Average Enterprise Value 1,667,930,700

- 8. As Table 1 above reveals, our three valuation approaches result in a reasonably consistent range of values. We have weighted each valuation approach based upon our qualitative assessment of the robustness of the data available to implement each approach. We have placed the highest weight on the DCF Approach because this approach was based upon robust financial projections specifically for the Brisas Project prepared on a contemporaneous basis for regulatory filing and bankable feasibility purposes. The Comparable Publicly Traded Company Approach was weighted the second highest due to the consistency of the valuation multiples observed from our list of comparable companies. The Comparable Transaction Approach was weighted the least due to the wider range of valuation multiples observed from our list of acquired comparable gold mining companies.
- 9. We did not measure the value of the Choco 5 Property utilizing these same three valuation approaches because the Choco 5 Property is an exploration property without any defined reserves or resources. The values of exploration properties are typically measured via the Comparable Transaction Approach. However, we were unable to identify any transactions that would help us to reliably implement this approach. Accordingly, we have measured Claimant's loss with regard to the Choco 5 Property as the sum of the amounts Claimant spent to acquire and develop it (i.e., the "Cost Approach"). The Cost Approach does not result in a value consistent with the fair market value standard. In this context, the Cost Approach results in a conservative estimate of value for the Choco 5 Property. The Cost Approach yields a value of US\$ 1,421,000 for the Choco 5 Property.
- 10. Accordingly, Claimant's total loss is equivalent to the sum of the fair market value of the Brisas Project and the value of the Choco 5 Property as of 14 April 2008 (US\$ 1,669,351,700) plus interest. We believe there are three appropriate rates of interest that the tribunal may consider awarding Claimant for the time value and opportunity cost of money: 1) Venezuela's yield on US dollar denominated sovereign bonds, 2) the London Interbank Offer Rate ("LIBOR") plus 4 percent, and 3) the US Prime Rate of interest plus 2 percent. In our view the most appropriate interest rate would be Venezuela's yield on US

value of all of a company's assets is typically referred to as the "enterprise value" of the business. The value of an enterprise is determined by the cash flows produced by the assets of the business.

54. The enterprise value of a business will necessarily equal the sum of all investment interests in the business. Commonly, businesses are financed using debt and equity. Therefore, the enterprise value or market value of assets will be equal to the market value of the debt and equity. This relationship showing the equality of the market value of the assets to the combined value of the debt and equity interests in those assets is expressed in Figure 7 below.

Figure 7 – Fundamental Corporate Valuation Model



- 55. Determining what aspect of the business is to be valued, equity only or the enterprise value (equal to the debt plus the equity), will dictate how each valuation approach is implemented.
- 56. In the present case, Claimant (directly or indirectly) owned 100 percent of the legal rights that are defined above as the Brisas Project and the Choco 5 Property. Consequently, Claimant is entitled to 100 percent of the ownership benefits flowing from the Brisas Project and the Choco 5 Property. Therefore, in Figure 7 above, Claimant's ownership is represented by the "Market Value of Assets (Enterprise Value)" which equates to the sum of the "Market Value of Debt" and the "Market Value of Equity."
- B. Accepted Methods for Determining the Fair Market Value of a Business or Income Generating Asset
- 57. There are three generally accepted methods of determining the fair market value of a business or an income generating asset: 1) the Discounted Cash Flow ("DCF") Approach; 2) the Comparable Publicly Traded Company Approach, and 3) the Comparable Transaction Approach.⁷⁹ In some circumstances it is appropriate to consider the publicly traded value of the company itself (if it is publicly traded) or any arms-length transactions or offers made for the shares of the subject company itself. However, the trading value, transaction price, or offers made should only be relied upon so long as the market conditions were

⁷⁹ Note that we use the terms "business" and "company" interchangeably. Both business and company can also be applied to the Brisas Project as we use them.

similar at the time to the market conditions on the valuation date and the measures complained of by claimant do not negatively affect the observed price.

58. The most commonly implemented valuation methodology is the DCF approach. The DCF approach is popular, because it stems directly from the fundamental financial principle that the value of a company is equal to the future cash flows produced by the company, discounted to present value at a rate that reflects the risks of generating the future cash flow. However, other approaches should also be given consideration. Thus, the valuation practitioner should attempt to implement all three valuation approaches when it is feasible to do so. When the available data does not exist to perform one or more of the valuation methods, the valuation practitioner should identify the deficiencies and acknowledge that the approach could not be conducted in a manner that would yield a reliable result. We provide a brief overview of the three basic valuation approaches utilized under the fair market value standard.

a. The Discounted Cash Flow Approach

- 59. The DCF Approach is perhaps the most common and widely accepted valuation approach because it is a practical implementation of the theoretical financial concept that an income-producing asset's value is equal to the present value of the future cash flows produced by the asset. In order to implement the DCF approach, the valuation practitioner first creates a projection of expected future performance of the business that is to be valued. Then, using the projected performance, the practitioner calculates the relevant cash flows, determines an appropriate discount rate, and discounts the future cash flows to present value.
- 60. In a DCF valuation the cash flows produced by the business is calculated after deducting all necessary expenses and taxes that must be paid in executing the business. Valuation practitioners typically refer to this cash flow measure as "free cash flow" as it represents the cash flow available to be paid to lenders or shareholders after all expenditures have been met. In the present case, Claimant holds 100 percent of the Brisas Project and the Choco 5 Property and is therefore entitled to 100 percent of the free cash flows these assets were expected to produce.
- 61. The discount rate represents the financial return that investors require in order to accept the risks of receiving the expected future free cash flow. Generally, as the risk of the cash flow stream increases so does the discount rate. The discount rate is adjusted, therefore, for various types of risk entailed in making a particular investment, such as the risk of investing in equity as compared to bonds, the risk of investing in a smaller company, risks associated with the particular industry, country, etc.

overcome the risks of acquiring an exploration property, render these transactions as useless in establishing the fair market value of an acquired property let alone comparable properties.

209. Accordingly, we are not able to establish the fair market value of the Choco 5 Property. Instead, we have determined Claimant's loss related to the Choco 5 Property by calculating the "wasted costs" associated with the Choco 5 Property investment. Claimant's wasted costs are equal to the total amount spent to acquire and develop the investment. In order to calculate Claimant's wasted costs in the Choco 5 Property, we reviewed the Claimant's trial balance for G.R. Minerales El Choco, C.A as of 31 March 2008. The trial balance indicates Claimant has spent US\$ 1,421,000 to acquire and develop the Choco 5 Property. This figure is consistent with the amount Claimant reported that it spent on the Choco 5 Property in the audited financials included in the 2007 Annual Report. 250

VII. Total Damages

210. The total damages suffered by Claimant due to Respondent's Measures is the fair market value of the Brisas Project as of 14 April 2008 plus the wasted costs in the Choco 5 Property as of 14 April 2008.

Gold Reserve Investments

Damages as of April 14, 2008
(US\$s)

Value of Brisas Project

Value of Choco 5 Property

Total Damage

1,669,351,700

Table 19 – Summary of Damages as of 14 April 2008

211. To the damages summarized in the table above we apply interest from 14 April 2008 to compensate Claimant for the time value and opportunity cost of money. We believe it would be appropriate for the tribunal to consider three different commercial rates of interest when calculating the interest due to Claimant. We discuss each rate in turn.

The amount spent of US\$ 1,421,000 is the gross PP&E for office equipment, vehicles, and property and mineral rights. See G.R. Minerales El Choco CA. Accounts and Currency Exchange Schedule. 31 March 2008. (C-920) Gold Reserve Inc., Annual Information Form, December 31, 2007, p. 4. (NAV-4) Note that Choco 5 began as a joint venture between Gold Reserve and Bolivar Gold in which they agreed to jointly explore Choco 5 and Choco 9. In October 2003 they agreed to: "amend the terms of their previously announced joint venture with respect to the Choco 5 and Choco 9 concessions in the El Callao gold district in Venezuela. Bolivar Gold has agreed to terminate its option to earn a 50% in Choco 5 and Gold Reserve has agreed to relinquish its 50% interest in Choco 9, such that Gold Reserve will retain its 100% interest in Choco 5 and Bolivar Gold will hold a 100% interest in Choco 9." Gold Reserve Press Release, "Bolivar Gold and Gold Reserve Amend Terms of Choco 5 and Choco 9 Joint Venture," October 14, 2003. (NAV-98)

²⁵⁰ "Since acquiring the Choco 5 property in 2000, the Company has invested approximately \$1.4 million on acquisition and exploration costs." Gold Reserve Inc., Annual Information Form, December 31, 2007, p. 4. (NAV-4)

Case 1:14-cv-020144-116-Brve Documenta35-4-pub File 0e-08/31/15 Page 8 of 14

				2007	2007	2007	2007	2008	2008	2008	2008
Sources and Notes	Calculation Logic	Component	Unit/ Assumption	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
See Note 1		Nominal Figures Italicized		Q.	Q2	Qu	Q ²	Ć1	Q-	QU	Q1
See Note 2		Metals Prices									<u> </u>
		Gold (\$/oz)							\$931.60	\$931.60	\$931.60
		Silver (\$/oz)							\$17.95 \$3.88	\$17.95 \$3.88	\$17.95 \$3.88
		Copper (\$/lb)							\$3.00	ъэ.00	\$3.00
		Revenue						<< <historical period<="" td=""><td></td><td></td><td></td></historical>			
'Economic Summary'	[A]	Gold	\$						-	-	-
'Economic Summary'	[B]	Silver	\$						-	-	-
'Economic Summary'	[C]	Copper	\$						-	-	-
	[D] = [A] + [B] + [C]	Total	\$						-	-	-
		Total Cost of Color									
Operating Costs Summary'	[E]	Total Cost of Sales Mining	\$								6,638
Operating Costs Summary'	[F]	Processing	\$						-	-	6,636
Operating Costs Summary'	[G]	General & Administration	\$						_	_	1,443,227
'Revenue Schedule'	[H]	Transportation	\$						_	_	-
'Revenue Schedule'	[I]	Offsite Treatment Total	\$						-	-	-
'Revenue Schedule'	(J)	Offsite Treatment Participation Charges	\$						-	-	-
See Note 3	[K] = [I] + [J]	Offsite Treatment net Participation Charges	\$						-	-	-
	$[L] = (\sum ([E] \text{ to } [H]) + K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$						-	-	1,484,612
'Revenue Schedule'		Offsite Treatment Participation Charges							-	-	-
'RoyaltyTax Schedule' See Note 4	[M]	Exploitation Tax Inflation Adjusted Total	\$ \$						-	-	1,484,612
See Note 4	[N] = [L] + [M] + [N]	initation Adjusted Total	\$						-	-	1,484,612
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%								
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$						(35,754,130)	(38,982,372)	(54,313,668)
	[Q]	Updated VAT	\$						(2,574,297)	(2,806,731)	(4,014,503)
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$						-	-	-
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$						-	-	-
	[T]	Income Tax	\$						-	-	-
See Note 6	[U] = [D]-[N]+[P]+[Q]+[R]+[S [T]	S]- Free Cash Flow	\$						(38,328,428)	(41,789,103)	(59,812,784)
		Trace and the second									
		Inflation & Discount Adjustments Assumed Date of Cash Flow						3/31/2008	6/30/2008	9/30/2008	12/31/2008
	[V]	Days from 14 April 2008	4/14/2008						77	169	261
	[W] = [V] / 365	Discount Period	years						0.2	0.5	0.7
	$[X] = 1/[rate)^{\wedge}[W]$	Discount Factor	9.06%						0.98	0.96	0.94
See Note 7	[Y]	Days from 31 December 2007	12/31/2007					91	182	274	366
	[Z] = [Y] / 365	Inflation Period	years					0.25	0.50	0.75	1.00
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.00	1.00	1.00	1.00	1.01	1.01	1.02	1.02
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$					-	(37,633,463)	(40,144,065)	(56,215,672)
'Additional Resource Projection'	[AC]	Present Value of Additional Resources	\$								
	[AD = [AB] + [AC]	Total Value	\$								

Case 1:14-cv-020144-116-Brve Documenta35-4-pub File 0e-08/31/15 Page 9 of 14

				2009	2009	2009	2009	2010	2010	2010	2010
Sources and Notes	Calculation Logic	Component	Unit/ Assumption	01	Q2	Q3	Q4	Q1	O2	Q3	Q4
See Note 1		Nominal Figures Italicized		χ-	χ-	χ.	χ-	χ-	χ-	χ.	χ-
See Note 2		Metals Prices									
		Gold (\$/oz)		\$952.60	\$952.60	\$952.60	\$952.60	\$977.60	\$977.60	\$977.60	\$977.60
		Silver (\$/oz)		\$18.32	\$18.32	\$18.32	\$18.32	\$18.73	\$18.73	\$18.73	\$18.73
		Copper (\$/lb)		\$3.71	\$3.71	\$3.71	\$3.71	\$3.57	\$3.55	\$3.55	\$3.55
		Revenue								<< <pr< td=""><td>re-Production Period</td></pr<>	re-Production Period
'Economic Summary'	[A]	Gold	\$	-	-	-	-	-	-	-	-
'Economic Summary'	[B]	Silver	\$	-	-	-	-	-	-	-	-
'Economic Summary'	[C]	Copper	\$	-	-	-	-	-	-	-	-
	[D] = [A] + [B] + [C]	Total	\$	-	-	-	-	-	-	-	-
		Total Cost of Sales									
Operating Costs Summary'	[E]	Mining	\$	6,638	14,310	1,514,242	2,453,643	3,028,711	3,396,421	3,411,428	3,347,216
Operating Costs Summary'	[F]	Processing	\$	-	-	-	-	-	-	-	1,758,455
Operating Costs Summary'	[G]	General & Administration	\$	3,193,913	3,731,604	4,127,031	4,259,698	3,975,750	3,094,994	3,576,401	3,331,511
'Revenue Schedule'	[H]	Transportation	\$	-	-	-	-	-	-	-	-
'Revenue Schedule'	[I]	Offsite Treatment Total	\$	-	-	-	-	-	-	-	-
'Revenue Schedule'	[J]	Offsite Treatment Participation Charges	\$	-	-	-	-	-	-	-	-
See Note 3	[K] = [I] + [J]	Offsite Treatment net Participation Charges	\$	-	-	-	-	-	-	-	-
	$[L] = (\sum ([E] \text{ to } [H])+K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$	3,296,398	3,880,878	5,879,425	7,038,529	7,386,644	6,886,034	7,456,887	9,057,287
'Revenue Schedule'		Offsite Treatment Participation Charges		-	-	-	-	-	-	-	-
'RoyaltyTax Schedule'	[M]	Exploitation Tax	\$	-	-	-	-	-	-	-	-
See Note 4	[N] = [L] + [M] + [N]	Inflation Adjusted Total	\$	3,296,398	3,880,878	5,879,425	7,038,529	7,386,644	6,886,034	7,456,887	9,057,287
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%								
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$	(31,521,426)	(55,375,487)	(100,205,774)	(87,313,926)	(90,168,060)	(69,468,265)	(36,516,265)	(40,125,566)
	[Q]	Updated VAT	\$	(2,523,311)	(4,303,838)	(8,223,041)	(6,868,891)	(7,294,139)	(5,587,314)	(3,176,953)	(3,588,436)
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$	-	-	-	-	-	-	-	-
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$	-	(1,036,030)	-	-	-	-	-	(55,824,510)
	[T]	Income Tax	\$	-	-	-	-	-	-	-	-
	[U] = [D]-[N]+[P]+[Q]+[R]+[SI.									
See Note 6	[T]	Free Cash Flow	\$	(37,341,135)	(64,596,233)	(114,308,240)	(101,221,347)	(104,848,842)	(81,941,614)	(47,150,106)	(108,595,799)
		Inflation & Discount Adjustments									
		Assumed Date of Cash Flow		3/31/2009	6/30/2009	9/30/2009	12/31/2009	3/31/2010	6/30/2010	9/30/2010	12/31/2010
	[V]	Days from 14 April 2008	4/14/2008	351	442	534	626	716	807	899	991
	[W] = [V] / 365	Discount Period	years	1.0	1.2	1.5	1.7	2.0	2.2	2.5	2.7
	$[X] = 1/[rate)^{M}$	Discount Factor	9.06%	0.92	0.90	0.88	0.86	0.84	0.83	0.81	0.79
			<u> </u>	J							
See Note 7	[Y]	Days from 31 December 2007	12/31/2007	456	547	639	731	821	912	1004	1096
	[Z] = [Y] / 365	Inflation Period	years	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.03	1.04	1.04	1.05	1.05	1.06	1.07	1.07
	[****]	(affined to coot terms)	2.0570	1.00	1.04	1.04	1.00	1.00	1.00	1.07	1.07
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$	(34,352,822)	(58,155,449)	(100,685,253)	(87,229,934)	(88,444,043)	(67,642,207)	(38,080,359)	(85,809,722)
'Additional Resource Projection'	[AC]	Present Value of Additional Resources	\$	(01,002,022)	(00,100,110)	(100,000,200)	(07,223,334)	(00,111,010)	(07,012,207)	(50,000,555)	(00,000,122)
	[AD = [AB] + [AC]	Total Value	\$								
	(()		Ť								

Case 1:14-cv-02014-**ДЕВ**егу **Доситенту 35-4**-ри Filed **48/31/15** Page 10 of 14

				2011	2011	2011	2011	2012	2012	2012	2012
		Component	Unit/								
Sources and Notes	Calculation Logic	Nominal Figures Italicized	Assumption	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
See Note 1		Nominai Figures Italicizea									
See Note 2		Metals Prices									
		Gold (\$/oz)	\$1,007.20	\$1,007.20	\$1,007.20	\$1,007.20	\$1,042.30	\$1,042.30	\$1,042.30	\$1,042.30	
		Silver (\$/oz)		\$18.99	\$18.99	\$18.99	\$18.99	\$19.30	\$19.30	\$19.30	\$19.30
		Copper (\$/lb)		\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55
		Revenue		Production Period>>>							
'Economic Summary'	[A]	Gold	\$	87,922,259	140,205,401	149,304,916	122,071,652	135,802,226	147,389,588	148,939,898	134,025,062
'Economic Summary'	[B]	Silver	\$	1,246,853	1,836,515	2,021,025	2,085,743	2,147,965	2,223,626	2,173,814	2,019,558
'Economic Summary'	[C]	Copper	\$	36,508,589	50,078,457	54,973,893	47,869,750	48,593,328	39,380,664	45,733,276	62,275,989
	[D] = [A] + [B] + [C]	Total	\$	125,677,702	192,120,373	206,299,835	172,027,145	186,543,519	188,993,878	196,846,988	198,320,609
		Total Cost of Sales									
Operating Costs Summary'	[E]	Mining	\$	13,471,369	13,699,761	14,788,663	15,827,521	15,321,511	15,062,313	16,064,868	18,064,625
Operating Costs Summary'	[F]	Processing	\$	17,282,140	17,282,140	17,282,140	17,282,140	19,484,326	19,484,326	19,484,326	19,484,326
Operating Costs Summary'	[G]	General & Administration	\$	3,563,526	3,534,270	3,432,920	3,388,352	3,192,930	3,142,549	3,142,549	3,145,830
'Revenue Schedule'	[H]	Transportation	\$	1,856,471	2,550,754	2,791,664	2,443,048	2,479,889	2,022,234	2,329,710	3,125,985
'Revenue Schedule'	[I]	Offsite Treatment Total	\$	5,183,997	7,230,521	7,793,986	6,867,929	7,040,693	6,179,099	6,879,569	8,404,468
'Revenue Schedule'	[J]	Offsite Treatment Participation Charges	\$	(4,866,709)	(5,982,499)	(6,120,617)	(5,850,046)	(5,929,378)	(5,682,388)	(5,964,634)	(6,199,340)
See Note 3	[K] = [I] + [J]	Offsite Treatment net Participation Charges	\$	317,289	1,248,022	1,673,369	1,017,883	1,111,316	496,711	914,935	2,205,129
	$[L] = (\sum ([E] \text{ to } [H])+K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$	39,401,549	41,615,544	43,671,030	43,921,005	45,983,736	44,718,465	46,919,077	51,801,955
'Revenue Schedule'		Offsite Treatment Participation Charges		4,866,709	5,982,499	6,120,617	5,850,046	5,929,378	5,682,388	5,964,634	6,199,340
'RoyaltyTax Schedule'	[M]	Exploitation Tax	\$	3,430,487	5,621,381	6,136,303	4,957,468	5,310,703	5,228,929	5,581,854	5,860,700
See Note 4	[N] = [L] + [M] + [N]	Inflation Adjusted Total	\$	47,698,745	53,219,424	55,927,950	54,728,519	57,223,817	55,629,782	58,465,565	63,861,995
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%	62%	72%	73%	68%	69%	71%	70%	68%
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$	(98,376,856)	(4,811,385)	(4,856,188)	(1,603,524)	(8,768,378)	(1,190,058)	(1,242,259)	(4,346,250)
	[Q]	Updated VAT	\$	13,418,510	43,007,266	1,567,136	-	-	-	-	-
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$	-	-	-	-	-	-	-	-
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$	-	-	-	-	-	-	-	-
	[T]	Income Tax	\$	21,674,064	40,678,103	44,245,981	33,837,220	37,562,855	38,568,932	40,169,412	39,209,917
	[U] = [D]-[N]+[P]+[Q]+[R]+[S	3)-									
See Note 6	[T]	Free Cash Flow	\$	(28,653,454)	136,418,726	102,836,851	81,857,882	82,988,469	93,605,105	96,969,752	90,902,447
		Inflation & Discount Adjustments									
		Assumed Date of Cash Flow		3/31/2011	6/30/2011	9/30/2011	12/31/2011	3/31/2012	6/30/2012	9/30/2012	12/31/2012
	[V]	Days from 14 April 2008	4/14/2008	1081	1172	1264	1356	1447	1538	1630	1722
	[W] = [V] / 365	Discount Period	years	3.0	3.2	3.5	3.7	4.0	4.2	4.5	4.7
	$[X] = 1/[rate)^{\wedge}[W]$	Discount Factor	9.06%	0.77	0.76	0.74	0.72	0.71	0.69	0.68	0.66
		D (21D 1 222		4461	1000	1000			4 - 4 - 6	4805	1005
See Note 7	[Y] [Z] = [Y] / 365	Days from 31 December 2007 Inflation Period	12/31/2007	1186	1277	1369	1461	1552	1643	1735	1827
0. 11. 0			years	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.01
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.08	1.09	1.09	1.10	1.11	1.11	1.12	1.13
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$	(22,162,154)	103,256,472	76,154,780	59,308,099	58,840,935	64,948,580	65,828,129	60,374,828
'Additional Resource Projection'	[AB] = [U] x [X] [AC]	Present Value of Additional Resources	\$	(22,102,134)	103,230,472	70,134,700	33,300,033	30,040,333	04,340,300	00,020,129	00,374,020
	[AD = [AB] + [AC]	Total Value	\$								
			•								

Case 1:14-cv-02014-**ДЕВ**егу **Доситенту 35-4**-ри Filed **48/31/15** Page 11 of 14

				2013	2014	2015	2016	2017	2018	2019	2020
Sources and Notes	Calculation Logic	Component	Unit/ Assumption	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
See Note 1		Nominal Figures Italicized		13	11	13	10	17	10	19	110
See Note 2		Metals Prices									
		Gold (\$/oz)		\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80
		Silver (\$/oz) Copper (\$/lb)		\$19.45 \$3.55							
		copper (\$\psi_1D)		ψ3.33	φο.55	ψ3.33	φ3.33	ψ5.55	ψυ.υυ	ф3.33	ψ0.00
		Revenue									
'Economic Summary'	[A]	Gold	\$	467,173,635	486,088,706	545,926,877	538,881,534	500,800,424	541,162,614	471,707,771	478,139,365
'Economic Summary'	[B]	Silver	\$	7,865,655	8,118,670	8,706,334	7,687,307	7,608,409	7,579,776	6,982,864	7,148,771
'Economic Summary'	[C]	Copper	\$	277,466,612	251,520,276	189,283,807	257,057,494	224,633,027	184,215,874	244,106,308	228,887,569
	[D] = [A] + [B] + [C]	Total	\$	752,505,902	745,727,653	743,917,018	803,626,336	733,041,860	732,958,265	722,796,943	714,175,705
		Total Cost of Sales									
Operating Costs Summary'	[E]	Mining	\$	66,513,164	67,818,089	85,294,501	75,964,530	85,783,755	81,232,739	82,069,622	82,809,823
Operating Costs Summary'	[F]	Processing	\$	78,273,431	79,566,966	77,584,761	76,168,656	78,790,158	71,821,867	73,851,291	73,793,359
Operating Costs Summary'	[G]	General & Administration	\$	11,740,615	11,175,440	11,279,743	11,278,043	11,315,620	11,325,944	11,248,090	11,197,830
'Revenue Schedule'	[H]	Transportation	\$	13,868,459	12,614,126	9,611,385	12,883,319	11,305,765	9,355,894	12,244,339	11,503,642
'Revenue Schedule'	[I]	Offsite Treatment Total	\$	36,060,920	33,484,894	27,677,869	34,427,021	30,847,064	27,185,973	32,626,379	31,111,021
'Revenue Schedule'	[J]	Offsite Treatment Participation Charges	\$	(25,207,494)	(24,647,934)	(23,669,803)	(24,995,375)	(24,179,181)	(23,685,704)	(24,512,585)	(24,194,256)
See Note 3	[K] = [I] + [J]	Offsite Treatment net Participation Charges	\$	10,853,426	8,836,960	4,008,066	9,431,646	6,667,883	3,500,270	8,113,794	6,916,765
	$[L] = (\sum([E] \text{ to } [H])+K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$	206,398,428	209,888,443	224,177,172	227,041,072	242,652,151	227,143,359	246,075,297	250,218,361
'Revenue Schedule'		Offsite Treatment Participation Charges		25,207,494	24,647,934	23,669,803	24,995,375	24,179,181	23,685,704	24,512,585	24,194,256
'RoyaltyTax Schedule'	[M]	Exploitation Tax	\$	22,767,164	22,054,143	20,675,289	23,743,645	21,150,554	20,979,991	21,821,052	21,267,478
See Note 4	[N] = [L] + [M] + [N]	Inflation Adjusted Total	\$	254,373,086	256,590,520	268,522,265	275,780,093	287,981,886	271,809,054	292,408,933	295,680,095
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%	66%	66%	64%	66%	61%	63%	60%	59%
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$	(3,642,014)	(9,313,636)	(32,719,251)	(9,516,067)	(28,524,394)	(13,119,402)	(6,460,031)	(8,393,192)
	[Q]	Updated VAT	\$	-	-	-	-	-	-	-	-
		•									
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$	-	-	-	-	-	-	(5,248,847)	-
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$	-	-	-	-	-	-	-	-
	[T]	Income Tax	\$	145,836,731	142,022,189	133,927,194	151,598,520	124,379,289	129,478,852	125,607,955	121,340,907
See Note 6	[U] = [D]-[N]+[P]+[Q]+[R]+[S [T]	Free Cash Flow	\$	348,654,071	337,801,307	308,748,308	366,731,655	292,156,291	318,550,956	293,071,177	288,761,511
		Inflation & Discount Adjustments									
		Assumed Date of Cash Flow		6/30/2013	6/30/2014	6/30/2015	6/30/2016	6/30/2017	6/30/2018	6/30/2019	6/30/2020
	[V]	Days from 14 April 2008	4/14/2008	1903	2268	2633	2999	3364	3729	4094	4460
	[W] = [V] / 365	Discount Period	years	5.2	6.2	7.2	8.2	9.2	10.2	11.2	12.2
	$[X] = 1/[rate)^{N}[W]$	Discount Factor	9.06%	0.64	0.58	0.53	0.49	0.45	0.41	0.38	0.35
				I							
See Note 7	[Y]	Days from 31 December 2007	12/31/2007	2008	2373	2738	3104	3469	3834	4199	4565
	[Z] = [Y] / 365	Inflation Period	years	5.50	6.50	7.50	8.50	9.50	10.50	11.50	12.51
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.14	1.17	1.19	1.22	1.25	1.28	1.31	1.34
				· ·			<u> </u>				
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$	221,817,037	197,056,843	165,144,767	179,818,951	131,350,684	131,318,540	110,777,172	100,056,038
'Additional Resource Projection'	[AC]	Present Value of Additional Resources	\$								
	[AD = [AB] + [AC]	Total Value	\$								

Case 1:14-cv-02014-**ДЕВ**егу **Доситенту 35-4**-ри **Filed 08/21/15** Page 12 of 14

				2021	2022	2023	2024	2025	2026	2027	2028
Sources and Notes	Calculation Logic	Component	Unit/ Assumption	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18
See Note 1		Nominal Figures Italicized									
0. 27 . 0		M. I. D.									
See Note 2		Metals Prices		#1 0C0 00	#1 040 00	#1 0 < 0 0 0	#1.040.00	#1 0 CO OO	#1.040.00	#1.040.00	\$1.000.00
		Gold (\$/oz)		\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80	\$1,060.80
		Silver (\$/oz)		\$19.45	\$19.45	\$19.45	\$19.45	\$19.45	\$19.45	\$19.45	\$19.45
		Copper (\$/lb)		\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55	\$3.55
		Revenue									
'Economic Summary'	[A]	Gold	\$	422,626,757	414,364,457	439,365,377	454,171,256	398,626,892	477,565,891	525,555,984	518,783,568
'Economic Summary'	[B]	Silver	\$	6,561,838	6,292,161	6,765,446	7,029,297	6,530,540	7,594,325	7,268,336	6,972,405
'Economic Summary'	[C]	Copper	\$	261,269,986	288,431,502	240,352,641	212,986,243	264,343,667	136,024,128	187,621,280	204,979,406
	[D] = [A] + [B] + [C]	Total	\$	690,458,581	709,088,120	686,483,464	674,186,796	669,501,099	621,184,344	720,445,599	730,735,379
		T. 10 . (01									
Operating Costs Summary'	[E]	Total Cost of Sales	\$	85,670,337	80,554,786	68,522,271	60.406.006	69,035,748	65,655,826	FF 924 4F/	35,818,668
		Mining	\$ \$, ,			68,496,986		, ,	55,824,476	
Operating Costs Summary	[F]	Processing	\$ \$	72,796,859	85,042,841	82,940,751	85,042,841	82,847,680	81,379,011	82,824,200	84,321,669
Operating Costs Summary	[G]	General & Administration	,	11,196,630	11,120,587	11,066,269	11,015,017	10,992,587	10,969,535	10,780,355	10,691,193
'Revenue Schedule'	[H]	Transportation	\$	13,073,103	14,387,108	12,059,647	10,736,666	13,217,911	6,855,280	9,515,818	10,344,959
'Revenue Schedule' 'Revenue Schedule'	[I]	Offsite Treatment Total	\$ \$	34,053,444	36,854,445	31,997,780	29,309,994	34,207,811	20,014,076	27,379,535	29,031,805
	D m.m.	Offsite Treatment Participation Charges		(24,721,470)	(25,377,464)	(24,288,960)	(23,752,927)	(24,704,357)	(18,367,568)	(23,658,498)	(23,944,932)
See Note 3	[K] = [I]+[J]	Offsite Treatment net Participation Charges	\$ \$	9,331,974	11,476,981	7,708,820	5,557,067	9,503,454	1,646,507	3,721,037	5,086,874
m c1 111	$[L] = (\sum([E] \text{ to } [H])+K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$	264,243,397	285,368,566	262,932,033	267,093,251	280,657,858	257,806,111	257,879,568	237,433,310
'Revenue Schedule'	0.0	Offsite Treatment Participation Charges		24,721,470	25,377,464	24,288,960	23,752,927	24,704,357	18,367,568	23,658,498	23,944,932
'RoyaltyTax Schedule'	[M]	Exploitation Tax	\$	21,007,134	21,750,152	20,691,263	19,822,113	20,533,169	17,330,472	21,101,743	22,223,808
See Note 4	[N] = [L] + [M] + [N]	Inflation Adjusted Total	\$	309,972,001	332,496,182	307,912,256	310,668,291	325,895,383	293,504,152	302,639,809	283,602,049
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%	55%	53%	55%	54%	51%	53%	58%	61%
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$	(6,378,869)	(24,730,778)	(21,442,660)	(13,667,722)	(5,468,582)	(15,600,609)	(574,429)	(478,848)
	[Q]	Updated VAT	\$	-	-	-	-	-	-	-	-
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$	-	-	-	(2,953,778)	(6,048,746)	(7,741,639)	(7,926,664)	(11,363,291)
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$	-	-	-	-	-	-	-	-
	[T]	Income Tax	\$	109,870,574	108,468,554	108,803,861	102,657,450	98,679,703	89,994,136	119,176,618	129,742,033
	[U] = [D]-[N]+[P]+[Q]+[R]+[S]										
See Note 6	[T]	Free Cash Flow	\$	264,237,136	243,392,607	248,324,687	244,239,555	233,408,685	214,343,808	290,128,079	305,549,157
		Inflation & Discount Adjustments Assumed Date of Cash Flow		6/30/2021	6/30/2022	6/30/2023	6/30/2024	6/30/2025	6/30/2026	6/30/2027	6/30/2028
	[V]	Days from 14 April 2008	4/14/2008	4825	5190	5555	5921	6286	6651	7016	7382
	[V] [W] = [V] / 365	Discount Period	4/14/2006 vears	13.2	14.2	15.2	16.2	17.2	18.2	19.2	20.2
	$[X] = 1/[rate)^{N}$	Discount Factor	9.06%								0.17
	[A] = 1/[rate) [w]	Discount Factor	9.00%	0.32	0.29	0.27	0.24	0.22	0.21	0.19	0.17
C N =	p.a	Davis from 21 December 2007	10/01/2007	4020	F20F	F//C	(02)	6201	(DE)	7101	7407
See Note 7	[Y]	Days from 31 December 2007	12/31/2007	4930	5295	5660	6026	6391	6756	7121	7487
	[Z] = [Y] / 365	Inflation Period	years	13.51	14.51	15.51	16.51	17.51	18.51	19.51	20.51
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.38	1.41	1.44	1.48	1.51	1.55	1.59	1.62
		D AND OF CASE		00.000	70.001.115		50.001.000	F0 (0) (0)		-,	50.051.155
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$	83,951,389	70,904,117	66,330,612	59,804,923	52,404,428	44,125,735	54,764,712	52,871,175
'Additional Resource Projection'	[AC] [AD = [AB] + [AC]	Present Value of Additional Resources Total Value	\$ \$								
	[AD = [AD] + [AC]	Total value	\$								

Case 1:14-cv-02014-ик-Вету-Фоситенту-35-4-ри-Filed/ 08/21/15 Page 13 of 14

				2029	2030	2031	Total or Average
Sources and Notes	Calculation Logic	Component	Unit/ Assumption	Y19	Y20	Y21	
See Note 1		Nominal Figures Italicized					
See Note 2		Metals Prices		44.070.00			4.000 50
		Gold (\$/oz) Silver (\$/oz)		\$1,060.80			1,020.76
		Copper (\$/lb)		\$19.45 \$3.55			19.05 3.60
		copper (4).12)		ψ5.55			5.00
		Revenue					
'Economic Summary'	[A]	Gold	\$	70,051,716	-	-	8,816,653,824
'Economic Summary'	[B]	Silver	\$	1,649,852	-	-	134,117,086
'Economic Summary'	[C]	Copper	\$	69,745,509	-	-	4,108,339,275
	[D] = [A] + [B] + [C]	Total	\$	141,447,077	-	-	13,059,110,186
		Total Cost of Sales					
Operating Costs Summary'	[E]	Mining	\$	13,111,522	-	_	1,309,656,718
Operating Costs Summary'	[F]	Processing	\$	34,712,745	-	-	1,450,583,400
Operating Costs Summary'	[G]	General & Administration	\$	6,226,192	-	-	241,896,746
'Revenue Schedule'	[H]	Transportation	\$	3,398,883	-	-	206,576,057
'Revenue Schedule'	[I]	Offsite Treatment Total	\$	8,525,602	-	-	560,375,896
'Revenue Schedule'	(J)	Offsite Treatment Participation Charges	\$	(8,244,575)	-	-	(438,748,694)
See Note 3	[K] = [I]+[J]	Offsite Treatment net Participation Charges	\$	281,027	-	-	121,627,202
'Revenue Schedule'	$[L] = (\sum ([E] \text{ to } [H])+K) \times [Y]$	Inflation Adjusted Operating Cash Flow	\$	95,955,079	-	-	4,453,362,514
'RoyaltyTax Schedule'	[M]	Offsite Treatment Participation Charges Exploitation Tax	\$	8,244,575 3,473,888	-	-	438,748,694 384,520,883
See Note 4	[N] = [L] + [M] + [N]	Inflation Adjusted Total	\$	107,673,543	-	-	4,837,883,398
	[1] [2] [2]	Timeton Taylasten Tom	Ť	107,070,013			1,037,003,330
	[O] = ([D] - [N]) / [D]	Gross Profit Margin	%	24%			63%
See Note 5	[P]	Inflation Adjusted - Capital Expenditures	\$	(94,018)	-	-	(965,064,342)
	[Q]	Updated VAT	\$	-	-	-	7,031,457
'Economic Summary'	[R]	Inflation Adjusted - Reclamation Expenditures	\$	(11,634,874)	(11,912,947)	(19,871,742)	(84,702,527)
'Economic Summary'	[S]	Inflation Adjusted - Change in Working Capital	\$	56,860,540	-	-	-
	[T]	Income Tax	\$	3,387,304			2,240,918,356
	[1]	income rax	ų.	3,307,304	_	_	2,240,310,330
	[U] = [D]-[N]+[P]+[Q]+[R]+[S]	1					
See Note 6	[T]	Free Cash Flow	\$	75,517,878	(11,912,947)	(19,871,742)	4,498,824,325
		Inflation & Discount Adjustments					
		Assumed Date of Cash Flow		6/30/2029	6/30/2030	6/30/2031	
	[V]	Days from 14 April 2008	4/14/2008	7747	8112	8477	
	[W] = [V] / 365	Discount Period	years	21.2	22.2	23.2	
	$[X] = 1/[rate)^{N}$	Discount Factor	9.06%	0.16	0.15	0.13	
See Note 7	[Y]	Days from 31 December 2007	12/31/2007	7852	8217	8582	
	[Z] = [Y] / 365	Inflation Period	years	21.51	22.51	23.51	
See Note 8	[AA]	Inflation Adjustment (applied to cost items)	2.39%	1.66	1.70	1.74	
	$[AB] = [U] \times [X]$	Present Value of Free Cash Flow	\$	11,981,679	(1,733,074)	(2,650,720)	1,502,251,686
'Additional Resource Projection'	[AC]	Present Value of Additional Resources	\$	//	1-,,	1-,,,	148,306,535
,	[AD = [AB] + [AC]	Total Value	\$				1,650,558,221
						_	

Gold Reserve Inc. v. The Bolivarian Republic of Venezuela Discounted Cash Flow Analysis Notes to Navigant DCF

Appendix 4.A

Sources and Notes:

- [1] The DCF analysis relies on the March 2008 NI 43-101 Model. (C-193) Because of this, we have included the model as part of the appendix. Pages from the original model are labeled in the upper left corner with the following title: "Gold Reserve Inc. Brisas Project". In three sections of the original model, we made changes based on our assumptions. These sections are: "Economic Summary" (Appendix 4.F), "Revenue Schedule" (Appendix 4.G), and "Capital Cost Summary" (Appendix 4.H). We highlighted the cells we adjusted in green. In addition to the three sections referenced above, we also include two sections that we directly reference in our discounted cash flow analysis. These sections are: "Operating Costs Summary" (Appendix 4.I) and "Royalty/Tax Schedule" (Appendix 4.J).
- [2] Futures prices from Bloomberg as of 14 April 2008. (NAV-32, NAV-39, and NAV-103) For years where there are more than two futures contract prices available we used the average of the prices for the period. For years where there were less than three futures contracts prices we used the average price from the prior year's December contract and the current year's December contract. The price used after the last year of available futures contracts is the price of the last futures contract available. The prices reflected are used as inputs in the revenue schedule page of the March 2008 43-101 model.
- [3] Participation charges are not included in our inflation adjustment as these charges are based on the nominal metal prices and therefore reflect the impact of inflation.
- [4] All operating costs are adjusted by the assumed inflation rate at this summary level except for exploitation taxes and offsite treatment participation charges. Exploitation taxes are a function of net revenue and therefore reflect the futures price assumption. Conservatively, we have not adjusted for inflation for some elements of net revenue that would reduce exploitation taxes, such as refining charges. Offsite treatment participation charges are a function of the prices of gold and copper and therefore reflect the futures price assumption.
- [5] Capital expenditures are increased by the assumed inflation rate on the "Capital Cost Summary" page. The adjustment is made on the "Capital Cost Summary" page and not on "Navigant DCF" page such that the impact of inflation affects to the assumed depreciation. Note the Capital Expenditures do not include capitalized pre-production costs as these are included on separate lines.
- [6] Cash flows begin in Q2 2008. All cash flows prior to Q2 2008 are considered sunk costs for purposes of our DCF analysis.
- [7] Costs reflect prices as of Q4 2007 according to the March 2008 NI 43-101 Report, pp. 22.11. (C-194)
- [8] Costs in the March 2008 43-101 model are assumed to be as of 31 December 2007 per the 31 March 2008 NI 43-101 Report. **(C-194)** Therefore, the inflation factor begins on that day. The annual inflation rate is calculated as the difference between 20-year U.S. Treasury Bonds **(NAV-40)** and 20-Year treasury U.S. inflation protected securities or "TIPS" average for April 2008. **(NAV-104)**