# VISTA GOLD CORP.





# Mt Todd Gold Project Advanced and De-Risked Northern Territory, Australia

September 2019

**NYSE AMERICAN & TSX: VGZ** 



This presentation contains forward-looking statements within the meaning of the U.S. Securities Act of 1933, as amended, and U.S. Securities Exchange Act of 1934, as amended, and forward-looking information within the meaning of Canadian securities laws. All statements, other than statements of historical facts that address activities, events or developments that Vista expects or anticipates will or may occur in the future, including such things as, the Company's continued work on the Mt Todd gold project; process improvements resulting in lower operating costs; reduced power consumption; increased gold recovery and higher gold production; estimates of reserves and resources; projected project economics, including anticipated production, average cash costs, before and after-tax NPV, IRR, capital requirements and expenditures, gold recovery after-tax payback, operating costs, average tonne per day milling, mining methods; project design, and life of mine; performance of and results of preliminary feasibility and feasibility studies, including the timing, cost and completion of the feasibility study on the Mt Todd gold project; the continued work and development on the Mt Todd gold project, our ability to continue to control holding costs; the impact that macro-economic factors may have on the economics on the Mt Todd gold project; existing infrastructure reducing project development time and costs; the continued support of the stakeholders and of the NT Government and the potential effects of Major Project Status for allowing project decisions to be made in an efficient and timely manner; timing and approval of the MMP; completion of tax and natural gas supply and pricing agreements; the project having the flexibility to be scaled down economically and then have production expanded at a later date; completion of future studies and exploration on the mining licenses including our understanding of the Quigleys deposit; completion of exploration programs on the exploration licenses; risks relating to the future effectiveness of the water treatment program and risks related to the discharge of water into the Edith River; future business goals, strategy and plans, competitive strengths and project development; success of future joint ventures, partnerships or other arrangements on our properties; the potential monetization of our non-core assets including the mill equipment; the value of Vista's investment in Midas; future royalties on the Awak Mas gold project; and other such matters are forward-looking statements and forward-looking information. The material factors and assumptions used to develop the forward-looking statements and forward-looking information contained herein include the following: no changes to laws or regulations impacting mine development or mining activities, our approved business plans, mineral resource and reserve estimates and results of preliminary economic assessments, preliminary feasibility studies and feasibility studies on our projects, if any, our experience with regulators, assumed timing for regulatory approvals and studies anticipated and estimated costs and budget expenditures to continue to optimize and advance Vista's core asset, our experience and knowledge of the Australian mining industry and positive changes to current economic conditions and the price of gold and other such matters. When used in this presentation, the words "estimate," "plan," "anticipate," "expect," "intend," "believe," "will," "if," "would," "could," and similar expressions are intended to identify forward-looking statements which may cause the actual results, performance or achievements of Vista to be materially different from any future results, performance or achievements expressed or implied by such statements. Such factors include, among others, uncertainty of resource and reserve estimates, uncertainty as to the Company's future operating costs and ability to raise capital; risks relating to cost increases for capital and operating costs; risks of shortages and fluctuating costs of equipment or supplies; risks relating to fluctuations in the price of gold and fluctuations in currency values; the inherently hazardous nature of mining-related activities; potential effects on our operations of environmental regulations in the countries in which it operates; risks due to legal proceedings; risks relating to political and economic instability in certain countries in which it operates; uncertainty as to the results of bulk metallurgical test work; and uncertainty as to completion of critical milestones for Mt Todd; as well as those factors discussed under the headings "Note Regarding Forward-Looking Statements" and "Risk Factors" in the Company's latest Annual Report on Form 10-K as filed on March 6, 2018 and other documents filed with the U.S. Securities and Exchange Commission and Canadian securities regulatory authorities. Although we have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements and forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Except as required by law, we assume no obligation to publicly update any forward-looking statements or forward-looking information; whether as a result of new information, future events or otherwise.

#### **Cautionary Note to United States Investors**

The United States Securities and Exchange Commission ("SEC") limits disclosure for U.S. reporting purposes to mineral deposits that a company can economically and legally extract or produce. This presentation uses the terms "Proven reserves" and "Probable reserves". Reserve estimates contained in this presentation are made pursuant to NI 43-101 standards in Canada and do not represent reserves under SEC Industry Guide 7 standards. Under SEC Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and all necessary permits and government approvals must be filed with the appropriate governmental authority. Additionally, this presentation uses the terms "Measured resources", "Indicated resources", and "Measured & Indicated resources". We advise U.S. investors that while these terms are Canadian mining terms as defined in accordance with NI 43-101, such terms are not recognized under SEC Industry Guide 7 and normally are not permitted to be used in reports and registration statements filed with the SEC. Mineral resources described in this presentation have a great amount of uncertainty as to their economic and legal feasibility. The SEC normally only permits issuers to report mineralization that does not constitute SEC Industry Guide 7 compliant "reserves" as in-place tonnage and grade, without reference to unit measures. The term "contained gold ounces" used in this presentation is not permitted under the rules of the SEC. "Inferred resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that any or all part of an Inferred resource will ever be upgraded to a higher category. **U.S. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into SEC Industry Guide 7 reserves.** 

#### Cautionary Note to All Investors Concerning Economic Assessments that Include Inferred Resources

The preliminary assessment on the Guadalupe de los Reyes gold project is preliminary in nature and includes "inferred mineral resources" that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment at the Guadalupe de los Reyes gold project will ever be realized.



## Recently announced PFS results are based on

- Optimized fine-grinding circuit and improved LOM gold recovery of 91.9%
- Comprehensive review of costs and schedules, including an independent benchmarking study
- Conservative design centered on industry-proven process technology
- Updated economics

## **PFS confirms**

- Substantial reserves and resources
- Top tier Australian gold production potential
- Lowest quartile Australian costs
- Significantly improved project economics

## Other positive considerations

- Brownfield site with existing infrastructure and major environmental permits approved
- Favorable location with social license firmly in place
- Significant exploration potential on adjacent exploration licenses (+1100 km<sup>2</sup>)



Mt Todd economics are strong at assumed long-term economic conditions and quite compelling at current market conditions

Debt and dilution for stand-alone development by Vista is not in the best interest of shareholders

PFS establishes a solid basis for conversations with prospective development partners who

- Recognize the value created by Vista and will provide appropriate reward for its shareholders
- Demonstrate capability to successfully advance Mt Todd
  - Financial Strength Technical Expertise Commitment to Social Responsibility

#### Moving Forward Vista will

- Continue to de-risk the project
- Communicate to the market the inherent value of this well-engineered, attractive project in a premium location and business environment

# Vista is prepared to preserve the value of Mt Todd to ensure that we reward our shareholders

# VISTA GOLD CAPITAL STRUCTURE

Corporate Information	
Symbol (NYSE American & TSX)	VGZ
Recent Share Price	\$0.89
Market Capitalization	\$89.4
Shares Outstanding <sup>1</sup>	100.5
Cash and Government Securities <sup>2</sup>	\$6.3
Working Capital (no debt) <sup>2</sup>	\$9.6
Major Shareholders	
Sun Valley Gold	18.7%
EuroPac Gold Fund	5.0%
Loews Corp.	3.2%
Global Strategic Management	3.0%
Vista Board and Management	3.0%

#### Analyst Coverage

Heiko F. Ihle - H.C. Wainwright & Co

Jake Sekelsky - Roth Capital Partners

Siddharth Rajeev - Fundamental Research Corp.

1. Fully Diluted 104.1M

2. June 30, 2019



Environmental water testing.

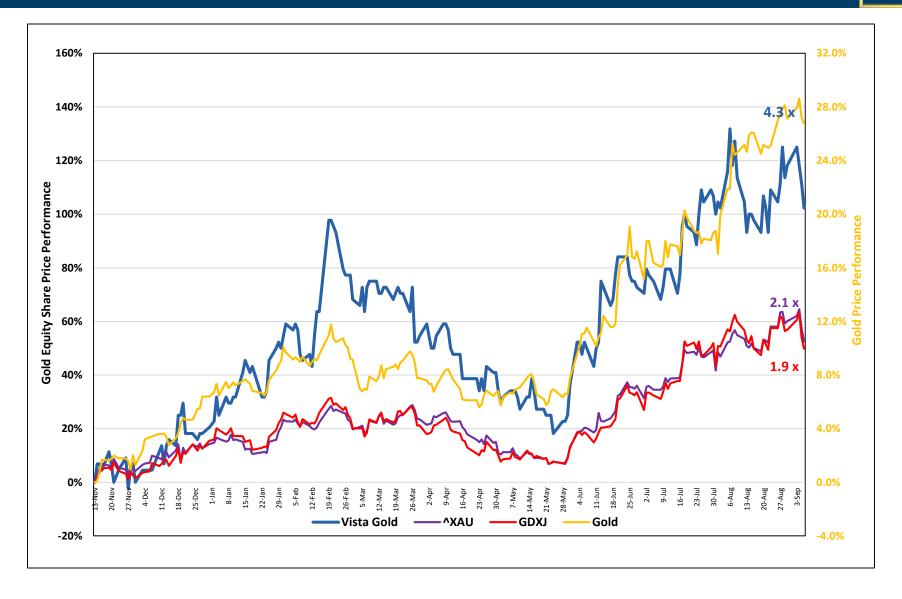


Site visit with Jawoyn leaders.



Mt Todd Open Day.

# LEVERAGE TO GOLD PRICE



November 13, 2018 thru September 6, 2019.



# **MT** TODD



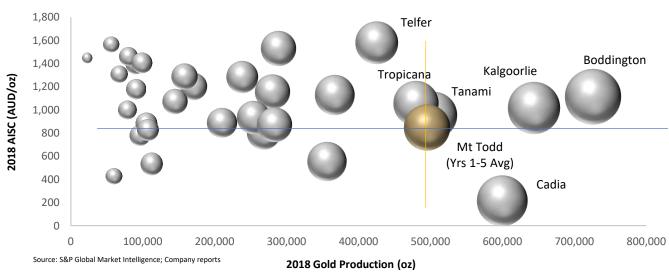


# **2019 PFS RESULTS**



## Positioned to be a Top 5 Australian gold producer with lowest quartile production costs<sup>1,2,3</sup>

- Avg. annual production of 495,100 oz (Yrs 1-5)
- AISC of US\$688/oz (Yrs 1-5)
- After-tax IRR 23.4%
- After-tax NPV<sub>5</sub> \$823 million



Est. Mt Todd Avg. Production & AISC vs. Australian Gold Mine 2018 Production & AISC<sup>4</sup>

#### Notes:

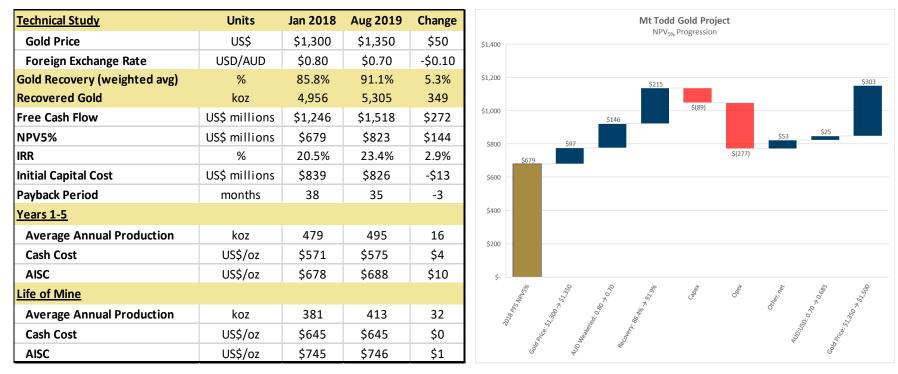
- 1. Based on Vista 2019 PFS results calculated using US\$1,350/oz gold prices and US\$0.70 per AUD
- 2. Based on publicly available individual mine production for 2018; Mt Todd 1st 5 years avg. production
- 3. Based on publicly available individual mine costs for 2018; Mt Todd 1st 5 years avg. AISC
- 4. US\$ reported AISC converted to AUD at US\$0.75 to AUD1.3397

# **2019 PFS RESULTS**



## Major Changes from the 2018 PFS

- Gold price
- Foreign exchange rate
- Reduced grind size from 60 to 40 microns
- Increased recovery
- FLS VXP mills have replaced the ISAMills
- Inclusion of a 24-month construction period, followed by 6-month commissioning and startup



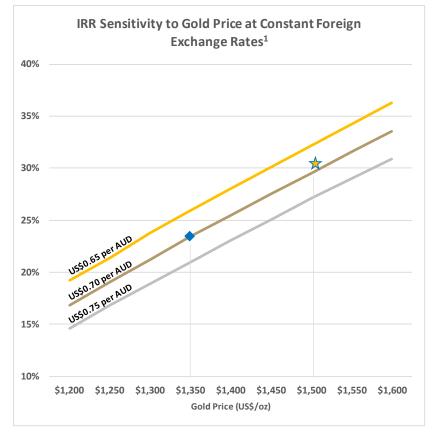
# STRONG LEVERAGE TO HIGHER GOLD PRICES



## Australian gold assets outperform in the current gold price environment

- US\$ gold prices complemented by soft Australian Dollar (~65% of costs in AUD)
- With improved gold recoveries, current gold price and FX rate, NPV<sub>5</sub> and IRR improved significantly





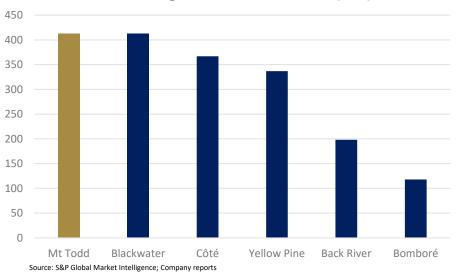
1. Vista September 2019 PFS results calculated using US\$1,350/oz gold prices and US\$0.70 per AUD

Notes:

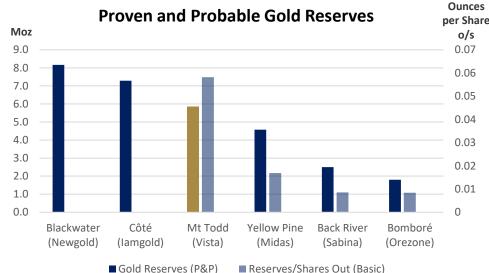
# PEER COMPARABLES

## **Mt Todd Advantages**

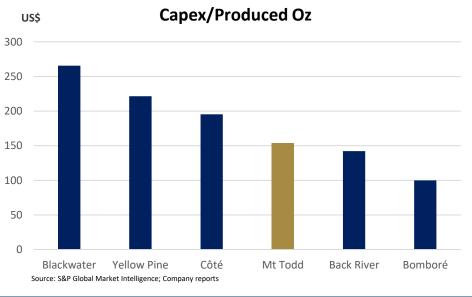
- 5.8 million oz Proven & Probable Reserves<sup>1</sup>
- 413,400 oz avg. annual production
- Capital efficient and long lived
- All material environmental permits approved (operating permit approval in process)
- Tier 1 mining jurisdiction
- Strong social license in place
  - 1. Please refer to Reserve and Resource Summary in the Additional Information. Includes 207.7 million tonnes of mine ore at 0.84 g Au/tonne (5.62 Moz) and 13.4 million tonnes of heap leach material at 0.54 g Au/tonne (0.23 Moz)



#### LOM Avg. Annual Production (koz)



Source: S&P Global Market Intelligence; Company reports





# SIGNIFICANT EXPLORATION UPSIDE



## **Direct Exploration Potential**

- 1,100 Km<sup>2</sup> Contiguous Exploration License (EL)
- Vista has focused on Mt Todd EL Land position is under-explored

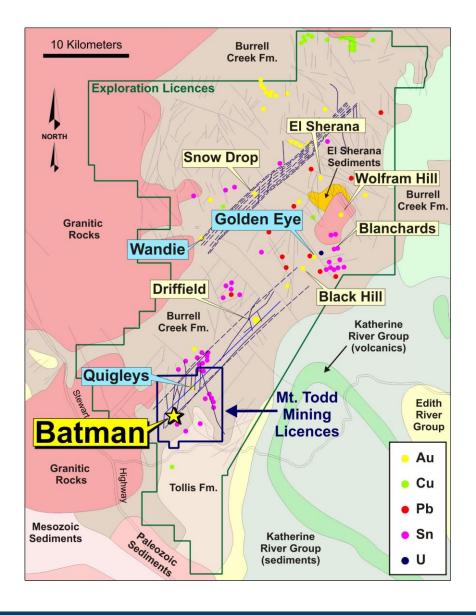
## **Advanced Targets**

- Quigleys (resource definition/conversion to reserves – potential to supplement Mt Todd Plant in yrs 6-8)
- Wandie (IOCG drilling following up on recent geophysics – possible high-grade, underground)
- Golden Eye (intrusive related sheeted vein, Batman-style mineralization – potential to increase project life)

## **Early Stage Targets**

- Wolfram Hill (Skarn Au W)
- El Sherana (Coronation Hill type Au-Pt)
- Blanchards surface gossan (IOCG)
- Black Hill (IOCG)
- Driffield (high-grade quartz veins)





# **KEY TAKEAWAYS**



## Vista's Mt Todd gold project is an exceptional asset

- Large-scale, long-lived project with low operating costs
- Brownfields re-development located in a Tier 1 mining jurisdiction
- All major environmental permits in hand
- 1,100 Km<sup>2</sup> highly prospective, under-explored land package

## Project de-risked through intensive, multi-year studies and application of proven technology

- Implemented design changes that have improved gold recovery and reduced power requirements
- Most engineering has been completed to feasibility study levels
- Strong project economics and returns, especially at current gold prices

### Focused on value recognition

- Mt Todd economics are strong at assumed long-term prices and compelling at today conditions
- Debt and dilution are not in the best interest of Vista shareholders
- PFS establishes a solid basis for conversations with prospective development partners who
  - Recognize the value Vista has created and appropriately reward shareholders
  - Demonstrate capability to successfully advance Mt Todd
- Continue to de-risk and communicate the inherent value of the project

## Leverage to the gold price

# **MANAGEMENT TEAM**

#### Frederick H. Earnest – President & CEO, Director

CEO since January 2012, senior officer of Vista since 2006, 30+ years industry experience (corporate management, mine operations & turn arounds, new project engineering and construction).

#### Douglas L. Tobler – Chief Financial Officer

CFO since July 2019. More than 35 years of corporate financial management experience gained as a chief financial officer, CPA, and corporate advisor.

#### John W. Rozelle – Senior Vice President

Senior Vice President since 2012, officer of Vista since May 2011, nearly 40 years experience as an economic geologist with project evaluation experience on 100+ gold projects worldwide and extensive experience managing resource estimation, metallurgical testing and major project feasibility studies.

#### Brent Murdoch – General Manager Mt Todd

GM since November 2012. 25 years industry experience in mine start-ups and large project construction including Ore Processing Facility Manager at Solomon Mine in Western Australia for Leighton Contractors.

#### Pamela A. Solly – Vice President, Investor Relations

VP of Investor Relations since April 2019. More than 25 years of public company experience strategically developing, coordinating and executing investor relations and corporate communications programs.



Pamela A. Solly Vice President, Investor Relations 7961 Shaffer Parkway, Suite 5 Littleton, CO 80127 720-981-1185



# VISTA GOLD



# Additional Information

fresh water reservoir spillway

AND COLORS STATES (SA COLORS

## **EXPERIENCED BOARD**





#### Michael Richings, Chairman

Former Executive of the Corporation from 2004 to 2012, including role of CEO. Director of Guyana Goldfields Inc.

#### Frederick Earnest – President, CEO & Director

CEO since January 2012, senior officer of Vista since 2006. Former President of Pacific Rim El Salvador and General Manager of Compañia Minera Dayton (Chile), 30+ years industry experience.

#### John Clark (Compensation Committee Chair)

Chartered Accountant. President of Investment and Technical Management Corp. Director of Russel Metals Inc. and Zephyr Minerals. Former CFO Polaris Geothermal Inc.

#### Randy Eppler (Governance Committee Chair)

Managing Director at Capstone Headwaters, LLC, a private middle market investment bank. Director of Golden Minerals and Plata Latina Minerals Corp. Former VP Corporate Development for Newmont.

#### Deborah J. Friedman

Senior of Counsel, Davis Graham & Stubbs LLP (DGS). Partner, DGS from August 2000 to December 2016 and counsel from May 1999 to August 2000. Held various senior positions in the law the departments of Golden Minerals Company, Cyprus Amax Minerals Company, and AMAX Gold. Has considerable experience in domestic and international mine development, finance and operations.

#### Tom Ogryzlo (HSE&SR Committee Chair)

Part-time Interim CEO and Director of Camrova Resources Inc. (formerly Baja Mining) and part-time Managing Director, Business Development of Franco-Nevada (Barbados) Corp. Director of Polaris Infrastructure Inc. Over 40 years industry experience, including Interim CEO of Aura Minerals, President, CEO and Director of Polaris Geothermal and President of Kilborn Engineering.

#### Tracy Stevenson (Audit Committee Chair)

Accountant. Former director of Uranium Resources Inc. Former director and non-executive chairman of Quaterra Resources and former director of Ivanhoe Mines Ltd. Founding member of Bedrock Resources, a private resources financial advisory firm and SOS Investors LLC, a private resources investment firm. Former Global Head of Information Systems at Rio Tinto PLC.

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Mt Todd Gold	Mt Todd Gold Project Reserves, Base Case (50,000 tpd) 0.40 g Au/t cut-off. Reserves calculated at \$1,250 per ounce gold price											
	Ba	tman De	oosit	Heap Leach Deposit			Quigleys Deposit			Total		
	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces
Proven	72,672	0.88	2,057	-	-	-	-	-	-	72,672	0.88	2,057
Probable	135,015	0.82	3,559	13,354	0.54	232	-	-	-	148,369	0.79	3,791
Proven & Probable	207,687	0.84	5,616	13,354	0.54	232	-	-	-	221,041	0.82	5,848

	Mt Todd Gold Project Resources, Base Case (50,000 tpd)											
	Ba	atman De	posit	Hea	o Leach D	Deposit	Qı	igleys De	posit		Total	
	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	<b>Ounces</b> (000's)	<b>Tonnes</b> (000's)	<b>Grade</b> (g/t)	Contained Ounces
Measured	77,725	0.88	2,191	-	-	-	457	1.27	19	78,182	0.88	2,210
Indicated	200,112	0.80	5,169	13,354	0.54	232	5,743	1.12	207	219,209	0.80	5,608
M&I	277,837	0.82	7,360	13,354	0.54	232	6,200	1.13	225	297,391	0.82	7,818
Inferred	61,323	0.72	1,421	-	-	-	1,600	0.84	43	62,923	0.72	1,464

Notes:

- Measured & Indicated Resources include Proven and Probable Reserves. Batman reserves are calculated at a 0.40 g Au/tonne cut-off grade and US\$1250 per ounce gold price. Batman and Quigleys resources are quoted at a 0.40g Au/t cut-off grade. Heap Leach reserves and resources are the average grade of the heap, no cut-off applied as all of this material is processed. Economic analysis conducted only on proven and probable reserves.
- Rex Bryan of Tetra Tech is the Qualified Person responsible for the Statement of Mineral Resources for the Batman, Heap Leach Pad and Quigleys deposits. Thomas Dyer of Mine
  Development Associates is the Qualified Person responsible for developing reserves for the Batman deposit. Deepak Malhotra of Resource Development Inc. is the Qualified Person
  responsible for developing reserves for the batman deposit.



Foreign		Gold Price (US\$)														
Exchange	1,3	350	1,4	100	1,4	450	1,5	500	1,!	550	1,6	500	1,6	650	1,7	700
(US\$/AUD)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)
0.55	31.4	1,077.1	33.7	1,180.6	36.0	1,284.4	38.1	1,384.1	40.3	1,483.9	42.5	1,584.0	44.6	1,684.0	46.7	1,784.1
0.60	28.6	994.3	30.8	1,093.3	32.9	1,196.9	35.0	1,296.5	37.2	1,400.6	39.3	1,500.2	41.3	1,600.3	43.4	1,700.3
0.65	25.9	911.2	28.0	1,010.5	30.1	1,109.6	32.2	1,209.0	34.3	1,312.8	36.3	1,417.1	38.3	1,516.7	40.3	1,616.6
0.70	23.4	822.9	25.5	927.4	27.6	1,026.7	29.6	1,125.9	31.5	1,225.1	33.5	1,329.1	35.5	1,433.5	37.4	1,533.2
0.75	20.9	733.3	23.1	838.9	25.1	938.2	27.1	1,042.9	29.0	1,142.1	30.9	1,241.2	32.8	1,345.4	34.7	1,444.9
0.80	18.7	650.2	20.7	749.0	22.8	854.9	24.7	954.2	26.7	1,059.1	28.5	1,158.3	30.4	1,257.4	32.2	1,361.7
0.85	16.7	568.5	18.6	665.9	20.5	764.8	22.5	870.8	24.4	970.2	26.3	1,075.3	28.1	1,174.6	29.9	1,273.7
0.90	14.7	483.0	16.6	584.3	18.5	681.6	20.3	780.6	22.3	886.8	24.1	986.1	25.9	1,091.5	27.7	1,190.8

Foreign		Gold Price (US\$)														
Exchange	1,0	000	1,0	)50	1,1	L00	1,1	L50	1,2	200	1,2	250	1,3	300	1,3	850
(US\$/AUD)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)	IRR (%)	NPV(5)
0.55	14.6	373.6	17.1	473.3	19.6	571.5	22.0	670.4	24.5	775.1	26.9	878.9	29.2	978.0	31.4	1,077.1
0.60	12.1	290.2	14.6	389.1	17.0	489.1	19.4	587.3	21.7	686.1	24.1	791.0	26.4	895.0	28.6	994.3
0.65	9.8	206.3	12.2	305.5	14.6	404.6	16.9	504.9	19.2	603.0	21.4	701.8	23.7	807.0	25.9	911.2
0.70	6.4	60.8	10.0	222.4	12.3	320.8	14.6	420.1	16.8	520.9	19.0	618.7	21.2	717.5	23.4	822.9
0.75	4.1	(41.6)	6.6	74.8	10.3	240.0	12.4	336.1	14.6	435.6	16.8	536.9	18.9	634.4	20.9	733.3
0.80	1.9	(149.8)	4.5	(24.1)	7.8	138.7	10.4	255.9	12.5	351.4	14.6	451.1	16.7	552.7	18.7	650.2
0.85	(1.2)	(308.4)	2.3	(132.2)	4.8	(10.4)	8.0	153.5	10.6	271.7	12.6	366.8	14.7	467.5	16.7	568.5
0.90	(3.9)	(446.9)	(0.4)	(279.0)	2.7	(114.7)	5.1	3.2	8.6	185.8	10.7	287.3	12.6	382.1	14.7	483.0

notes: 1) Changes in foreign exchange rates are only applied to operating costs and not applied to initial or sustaining capital costs

2) NPV5% is in US\$ millions

3) IRR and NPV5% are reported on after-tax basis

## **Comparison to Base Case**

- Smaller, higher grade reserve (\$800 ultimate pit)
- Same process flowsheet (sorting and 2-stage grinding)
- Lower initial capital cost
- Designed to be expandable to 50 ktpd
- Smaller footprint
- Smaller power plant (50 MW)
- Same environmental compliance expectations No permit amendments required

Sensitivity	Sensitivity Summary										
	Gold Price										
USD/AUD	\$1,200 \$1,350 \$1,500										
USD/AUD	IRR	IRR NPV(5) IRR NPV(5		PV(5)	IRR	NPV(5)					
\$0.60	18.3%	\$	432	23.6%	\$	620	28.5%	\$	807		
\$0.65	16.4%	\$	377	21.5%	\$	565	26.3%	\$	752		
\$0.70	14.5%	\$	325	19.4%	\$	507	24.2%	\$	697		
\$0.75	12.6%	\$	270	17.5%	\$	453	22.2%	\$	642		

Notes:

1. NPV(5) in US\$ millions

2. IRR and NPV(5) values are reported on an after-tax basis

PFS Results at \$1350/oz Au and US\$0.70 per AUD		ite Case ktpd
Proven & Probable Reserves <sup>1</sup>	3.56	Moz
Mine Life	11 y	ears
Stripping Ratio	1	.7
Avg. Annual Production	<u>Yrs 1-5</u> 318,000 oz	<u>LOM</u> 293,900 oz
Cash Cost	US\$588/oz	US\$604/oz
AISC	US\$689/oz	US\$708/oz
Initial Capital	US\$623	million
Payback Period	45.6 n	nonths
After-tax IRR	19.4	41%
After-tax NPV <sub>(5)</sub>	US\$ 507	7 million



Notes:

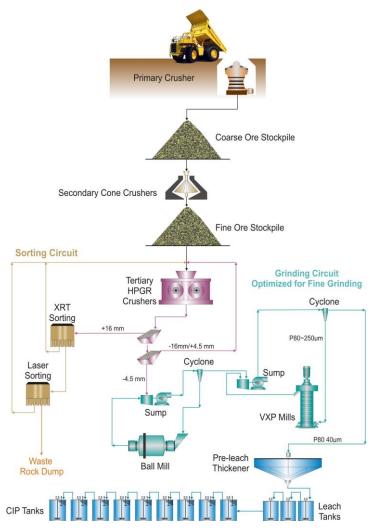
1. Includes 114.7 million tonnes of mine ore at 0.90 g Au/tonne ( 3.32 Moz) and 13.4 million tonnes of heap leach material at 0.54 g Au/tonne (0.23 Moz)

# **ADVANCED AND DE-RISKED**



## Vista's efforts have resulted in major project enhancements

**Optimized Mt Todd Process Flowsheet** 



# **PROVEN TECHNOLOGY**



## **Ore Sorting**

Sorting			No. of Units	Sorter Belt	Sorted Particle	Throughput/Unit
Method	Commodity	Country	Installed	Width (m)	Size (mm)	(tonnes/hr)
XRT	Tin	Peru	1	1.2	14 x 22	31
			1	1.2	22 x 32	48
XRT	Phosphate	Saudi Arabia	4	2.4	9 x 25	105
			3	2.4	25 x 57	210
XRT	Limestone	USA	2	1.2	9 x 25	70
			2	1.2	25 x 57	160
Laser	Gold	Brazil	1	1.2	20 x 60	55
XRT	Tungsten	Australia	1	2.0	25 x 75	60
XRT	Chromite	Brazil	1	2.0	25 x 75	80
XRT	Magnesite	Russia	1	1.0	30 x 90	65
XRT	Gold	Namibia	1	1.0	20 x 40	50
			1	1.0	40 x 60	70
XRT	Gold	Australia	5	2.4	16 x 40	82
XRT	Laser	Australia	7	1.2	16 x 40	35



Other gold operations using automated sorting include Kensington (Alaska) & Bjorkdahl (Sweden) with installation of equipment proceeding at GoldCorp mines in Canada

## **Fine Grinding**

Year	Country	Application	Qty	Model	total tonnage (dtph)
2012	South Africa	Gold Tailings Retreatment	4	VXP2500	108
2012	DRC	Gold Concentrate Regrind	4	VXP2500	60
2012	Mongolia	Bulk Concentrate Regrind	3	VXP5000	152
2012	Kazakhstan	Copper Flotation Rougher Concentrate	1	VXP5000	26.3
2015	Russia	Copper Flotation Concentrate	2	VXP2500	77.6
2016	DRC	Gold Concentrate Regrind	4	VXP2500	60
2017	China	Magnetite Regrind	1	VXP5000	150
2019	Canada	Gold Concentrate Regrind	1	VXP5000	137
2019		Refractory Gold	1	VXP5000	120



# **OTHER PORTFOLIO ASSETS**



#### Midas Gold Corp.

7,802,615 Common Shares

• 2011 combination and IPO of Vista's Yellow Pine (Idaho) project with Midas' Stibnite Gold Project

Guadalupe o	Guadalupe de los Reyes (Mexico) <sup>1</sup>										
Resources	Metric Tonnes	Gold Grade (g/t)	Silver Grade (g/t)	Contained Gold (oz)	Contained Silver (oz)						
Indicated	6,842	1.73	28.7	380,323	6,315,407						
Inferred	3,246	1.49	34.87	155,209	3,639,163						

- Optioned to Minera Alamos Inc. October 2017
- Vista completed a preliminary assessment of the project in February 2013

#### Awak Mas (Indonesia)

**Royalty Interest** 

- Nusantara Resources Limited (formerly One Asia Resources) undertaking development program to place the project into production
- Vista Gold has a 2.0% NSR on first 1.25 million ounces, 2.5% NSR on next 1.25 million ounces

<sup>1</sup> The preliminary assessment on the Guadalupe de los Reyes project is preliminary in nature and includes inferred resources that are considered too speculative geologically to have economic consideration applied to them that would enable them to be categorized as mineral resources. There is no certainty that the preliminary assessment at the Guadalupe de los Reyes project will ever be realized.



"NI 43-101 Technical Report Mt Todd Gold Project 50,000 tpd Preliminary Feasibility Study, Northern Territory, Australia," dated March 2, 2018, which was prepared under the supervision of Rex Clair Bryan, Ph.D., Tetra Tech, Inc.; Anthony Clark, P.E., Power Engineers, Inc.; Thomas L. Dyre, P.E., Mine Development Associates; Amy L. Hudson, Ph.D. CPG REM, Tetra Tech, Inc.; Chris Johns, M.Sc P.Eng, Tetra Tech, Inc.; Benjamin S. Johnson, P.E., Tetra Tech, Inc.; Deepak Malhotra, Ph.D., Resource Development, Inc.; Zvonimir Ponos, BE MIEAust CPeng. NER, Coffey Services Australia Pty Ltd.; Guy Roemer, P.E., Tetra Tech, Inc.; Vicki Scharnhorst, P.E. LEED AP, Tetra Tech, Inc.; D. Erik Spiller, QP, Tetra Tech, Inc.; Jessica I. Spriet, P.E., Tetra Tech, Inc.; Keith Thompson, CPG PG, Tetra Tech, Inc., each an independent qualified person.

"Amended and Restated NI 43-101 Technical Report Mt. Todd Gold Project 50,000 tpd Preliminary Feasibility Study, Northern Territory, Australia," dated July 7, 2014 which was prepared by or under the supervision of Dr. Rex Clair Bryan, Tetra Tech, Inc., Patrick Donlon FSAIMM FAusiMM NHD Ext Met, Proteus EPCM Engineers, Thomas Dyer PE, Mine Development Assoc., Dr. Deepak Malhotra, Resource Development, Inc., Nick Michael BS MBA, Tetra Tech, Inc., David Richers PhD PG, Tetra Tech, Inc., Lachlan Walker FIEAust CPEng, Proteus EPCM Engineers, Anthony Clark, PE, Power Engineers, Jagrut Jathal, PE, Knight Piesold, Benjamin S. Johnson, PE, Tetra Tech, Inc. and Keith Thompson, CPG, PG, Tetra Tech, Inc., each an independent qualified person.

"NI 43-101 Technical Report Mt Todd Gold Project 50,000 tpd Preliminary Feasibility Study, Northern Territory, Australia," dated June 28, 2013, which was prepared by or under the supervision of Dr. Rex Clair Bryan, Tetra Tech, Inc., Patrick Donlon FSAIMM FAusiMM NHD Ext Met, Proteus EPCM Engineers, Thomas Dyer PE, Mine Development Assoc., Dr. Deepak Malhotra, Resource Development, Inc., Nick Michael BS MBA, Tetra Tech, Inc., David Richers PhD PG, Tetra Tech, Inc., and Lachlan Walker FIEAust CPEng, Proteus EPCM Engineers, each an independent qualified person.

"NI 43-101 Technical Report Preliminary Economic Assessment of Guadalupe de los Reyes Gold Silver Project, Sinaloa, Mexico," dated February 8, 2013, which was prepared by or under the supervision of Dr. Rex Bryan, Edwin C. Lips P.E., Vicki Scharnhorst P.E., and Erik Spiller of Tetra Tech, Inc., each an independent qualified person.

"NI 43-101 Technical Report Resource Update Mt Todd Gold Project, Northern Territory, Australia," dated September 4, 2012, which was prepared by or under the supervision of Dr. Rex Bryan of Tetra Tech, Inc., Dr. Deepak Malhotra of Resource Development Inc., Thomas Dyer, PE, of Mine Development Associates, and Dr. Richard Jolk, PE, of Tetra Tech, Inc., each an independent qualified person.

"Amended and Restated NI 43-101 Technical Report Resource Update Mt Todd Gold Project, Northern Territory, Australia," dated April 11, 2012, which was prepared by or under the supervision of Dr. Rex Bryan of Tetra Tech MM, Inc. and Dr. Deepak Malhotra of Resource Development Inc., each an independent qualified person.

"NI 43-101 Technical Report, Resource Update, Mt Todd Gold Project, Northern Territory, Australia," dated September 6, 2011, which was prepared by or under the supervision of Dr. Rex Bryan, SME Registered Member, an independent qualified person.

"10.65 MTPY Preliminary Feasibility Study, NI 43-101 Technical Report, Vista Gold Corp., Mt Todd Gold Project, Northern Territory, Australia," dated January 28, 2011, prepared by or under the supervision of John W. Rozelle, D. Erik Spiller, Stephen A. Krajewski, and Edwin C. Lips of Tetra Tech MM, Inc., Thomas L. Dyer, Mine Development Associates and Deepak Malhotra, Resource Development Inc., each an independent qualified person.

"Preliminary Feasibility Study, NI 43-101 Technical Report, Vista Gold Corp., Mt Todd Gold Project, Northern Territory, Australia," dated October 1, 2010, prepared by or under the supervision of John W. Rozelle, D. Erik Spiller, Stephen A. Krajewski, and Edwin C. Lips of Tetra Tech MM, Inc., Thomas L. Dyer, Mine Development Associates and Deepak Malhotra, Resource Development Inc., each an independent qualified person.

"Amended and Restated NI 43-101 Technical Report Preliminary Economic Assessment of Guadalupe de los Reyes Gold Silver Project, Sinaloa, Mexico," dated July 3, 2014, which was prepared by or under the supervision of Dr. Rex Bryan, Edwin C. Lips P.E., Vicki Scharnhorst P.E., and Erik Spiller of Tetra Tech, Inc., each an independent qualified person.

"Technical Report for the Guadalupe de los Reyes Gold-Silver Project, Sinaloa, Mexico," dated August 12, 2009, and amended and restated on December 11, 2009, prepared by or under the supervision of Leonel Lopez of Pincock, Allen & Holt, an independent qualified person.