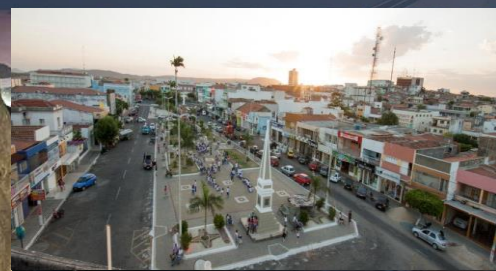
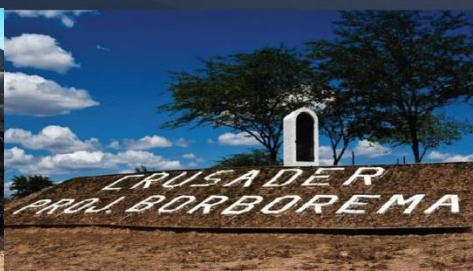


# crusader

## Brazilian Gold

FEBRUARY 2017



## Disclaimer

The information provided in this presentation is of a general nature only. Although it has been prepared in good faith with all due care there can be no guarantee that it will continue to be accurate in the future. No one should act or rely upon the information but should undertake their own independent due diligence or seek appropriate professional advice. To the extent permitted by law Crusader Resources Limited ("Crusader") excludes all liability from any statement in, or omission from, this presentation. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell Crusader securities in any jurisdiction.

## Forward Looking Statements

This presentation may contain certain forward looking statements and projections regarding:

- estimated resources and reserves;
- planned production and operating costs profiles;
- planned capital requirements; and
- planned strategies and corporate objectives.

Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Crusader.

The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.

Crusader does not make any representations and provides no warranties concerning the accuracy of the projections, and disclaims any obligation to update or revise any forward looking statements/projections based on new information, future events or otherwise except to the extent required by applicable laws.

## Competent Person Statement

The information in this report that relates to Juruena Gold Project exploration results, Posse Iron Ore Project exploration results and Borborema Gold Project exploration results released after 1 December 2013, is based on information compiled or reviewed by Mr. Robert Smakman who is a full time employee of the company and is a Fellow of the Australasian Institute of Mining and Metallurgy. The information in this report that relates to Mineral Resources at the Juruena Gold Project is based on information compiled or reviewed by Mr. Lauritz Barnes and Mr. Aidan Platel who are independent consultants to the company and Members of the Australasian Institute of Mining and Metallurgy. Each of Mr. Smakman, Mr. Barnes and Mr. Platel have sufficient experience that is relevant to the type of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Smakman, Mr. Barnes and Mr. Platel consent to the inclusion in the report of the matters based on this information in the form and context in which it appears. The information in this report that relates to:

- a) Borborema Gold Project and Posse Iron Ore Project Exploration Results released prior to 1 December 2013 is based on information compiled or reviewed by Mr Robert Smakman who is a full time employee of the company;
- b) Borborema Gold Mineral Resources is based on information compiled by Mr Lauritz Barnes and Mr Brett Gossage, independent consultants to the company;
- c) Borborema Gold Ore Reserves is based on information compiled by Mr Linton Kirk, independent consultant to the company;
- d) Posse Fe Mineral Resources is based on and accurately reflects, information compiled by Mr Bernardo Viana who is a full time employee of Coffey Mining Pty Ltd,

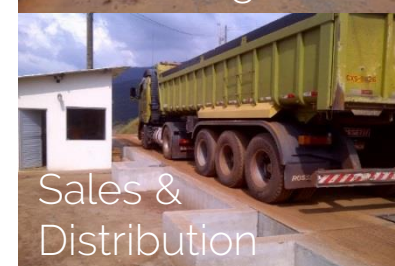
and who are all Members of the Australasian Institute of Mining and Metallurgy (Rob Smakman and Linton Kirk being Fellows), and who all have sufficient experience that is relevant to the type of mineralisation and type of deposit under consideration, and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Each of Mr Smakman, Mr Lauritz Barnes, Mr Kirk, Mr Viana and Mr Brett Gossage consent to the inclusion in the report of the matters based on their information in the form and context in which it appears. This information was prepared and disclosed under the JORC Code 2004. It has not been updated since to comply with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

# Crusader Resources

## Advanced Projects *Proven Experience*

- Discovered, developed and operate in Brazil 12+ years in country experience.
- Proven ability to advance projects from exploration to production
- Undervalued - transitioning from Iron ore to Gold Production. **Gold value not represented** in current valuation.
- Two advanced gold projects - Combined 2.7Moz Au, Expenditure of ~ \$70M
  - Borborema - 1.61Moz Au Reserve\* 2.4Moz Resource 95,000m drilled
  - Juruena - 260koz Resource\* 52,000m drilled PEA Q1 2017
- Management and operational team in place

Crusader's current  
Brazilian Operations  
**2017**



# Pipeline of Advanced Gold Projects

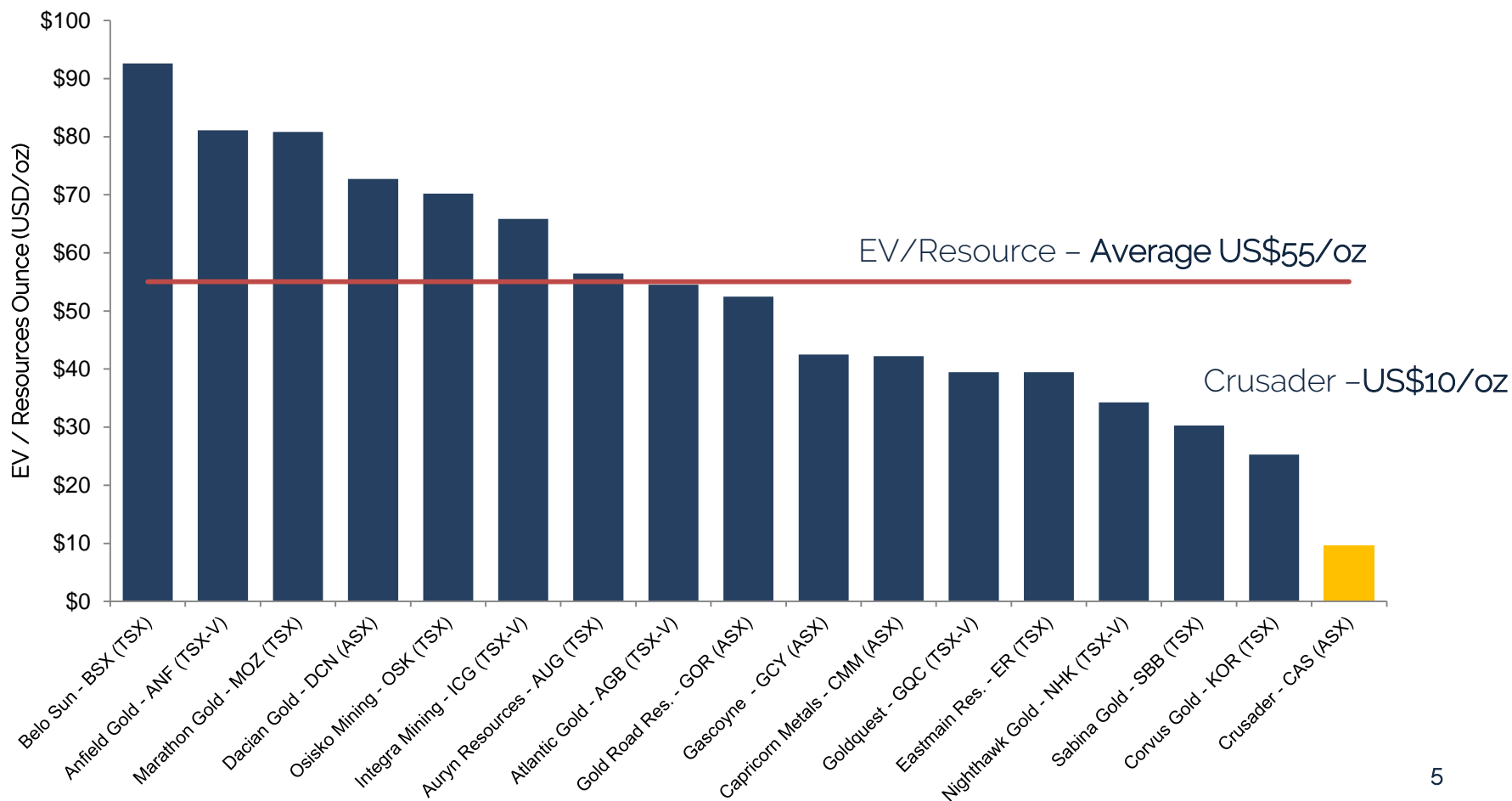


	Borborema	Juruena
<b>Ownership</b>	100%	100%
<b>Stage</b>	PFS - Final Permitting	PEA, Early Development Option
<b>Reserve</b>	1.6Moz	-
<b>Resource</b>	2.43Moz	260koz
<b>Mining Method</b>	Open pit Bulk Tonnage	Open pit - underground <b>High Grade 15 g/t.</b>
<b>Processing Method</b>	CIL - 2Mtpa	CIL - 100k tpa
<b>Production Profile</b>	~ 75koz/yr	~ 40koz/yr
<b>LOM</b>	10 yrs +	5 yrs
<b>Licences</b>	Operating Licence Granted Alteration Licence Pending	Trial Mining Licence Granted
<b>Target</b>	+100koz pa	+50koz pa
<b>Infrastructure</b>	Road, power, water, Labour	Road, Barge, Airstrip, Camp

# Undervalued – Quality Projects

Crusader is significantly undervalued compared to its peer group of Advanced Exploration / Development stage gold companies.

## Gold Developers & Explorers - EV/ Resource

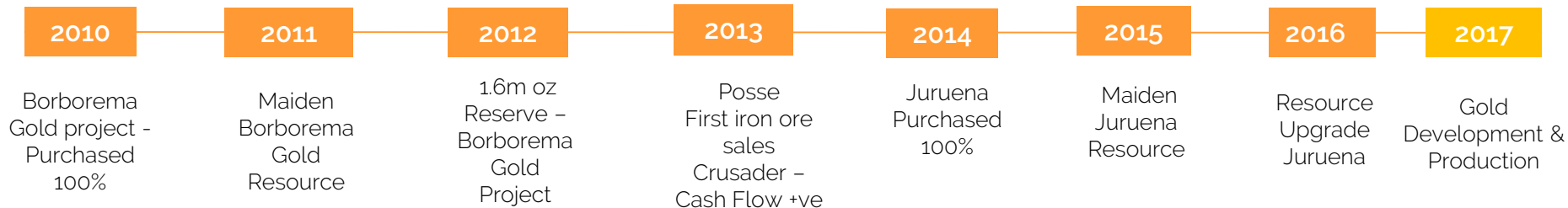
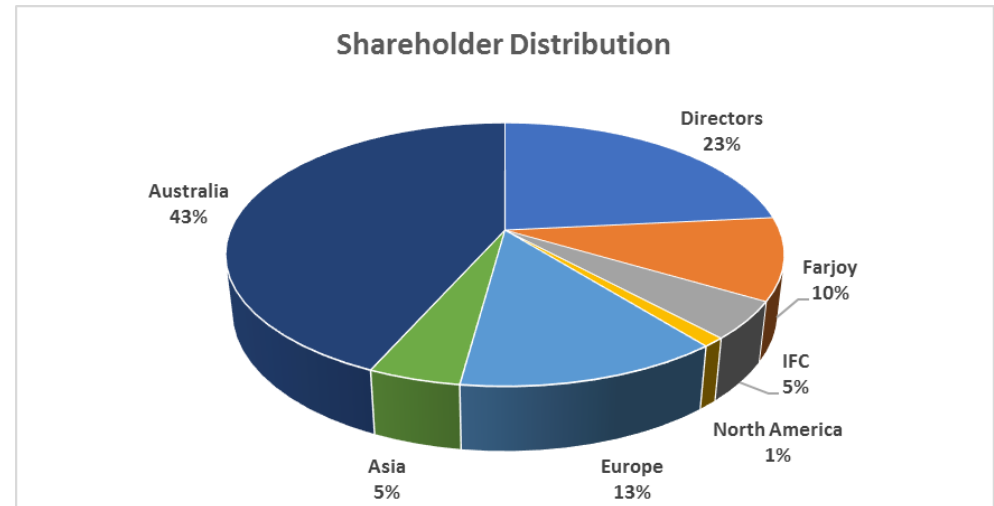


# Corporate Overview

## ASX : CAS

Total Ordinary Shares on Issue	300m
Options on issue <sup>1</sup>	42.0m
Cash (as at 31 December 2016) <sup>2</sup>	A\$1.6m
Debt	nil
Market Capitalisation (at 11.5cps)	A\$35m
Reserves	1.6Moz
Resources	2.7Moz
Mkt Cap/Reserve (\$US)	\$16/oz
Mkt Cap/Resource (\$US)	\$10/oz

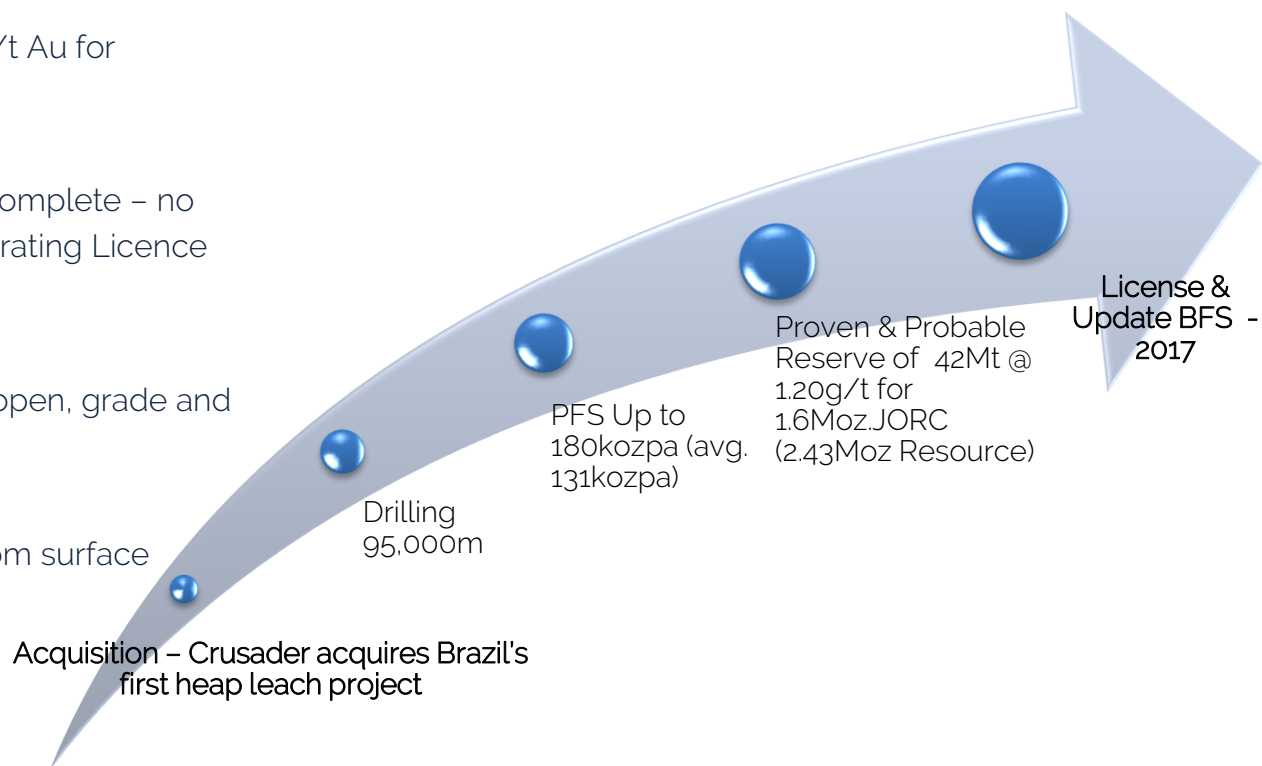
## Major Shareholders and distribution



Crusader's Posse Iron Ore mine is a successful Brazilian small scale Iron ore producer. Proceeds contribute towards the development of Crusaders Gold Assets - Posse delivers Iron ore lump and fines into the Brazilian Domestic Pig Iron markets, Crusader purchased the project as a Greenfields tenement and completed all drilling, permitting, construction and operations in house, Revenue to date \$R113M

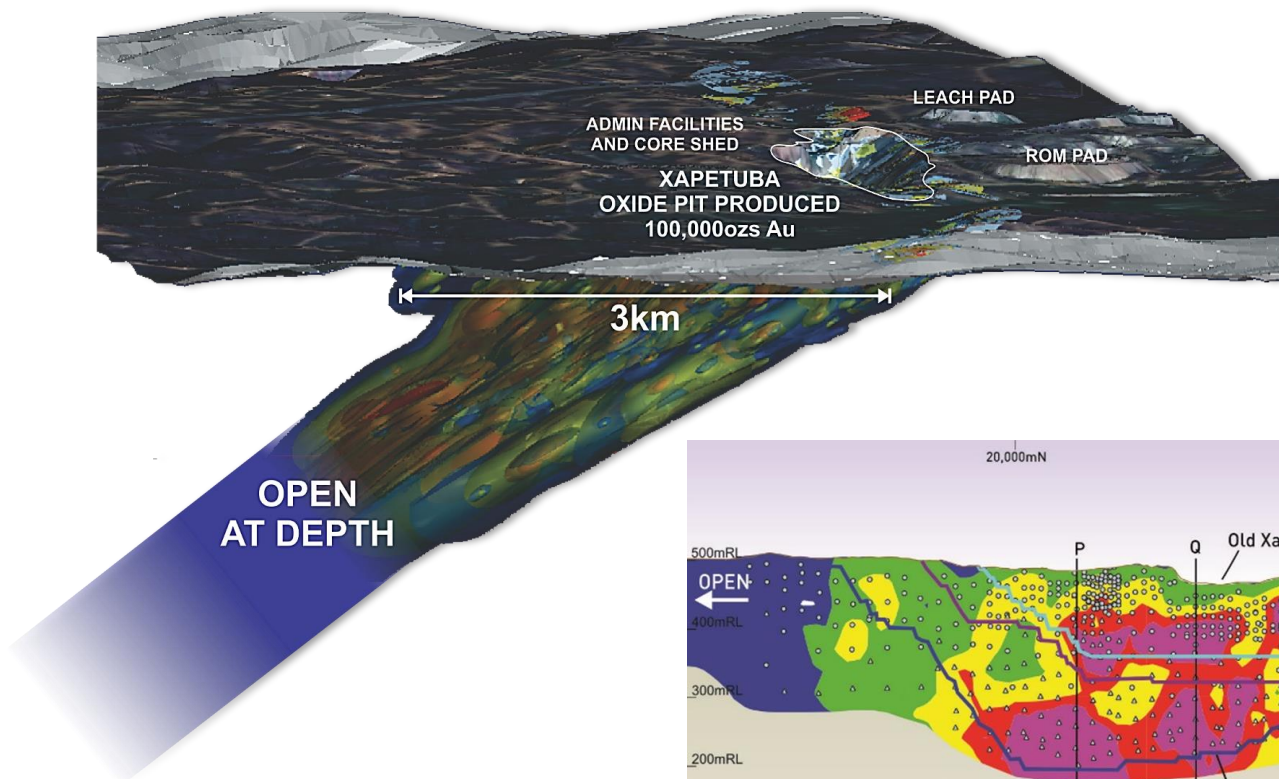
# First Gold Project - Borborema - Overview

- Advanced gold project in an excellent part of Brazil. Previously produced 150koz
- Large, 100% owned, open-pittable gold mine:
  - Mineral Resource: 68.6Mt @ 1.10g/t Au for **2.43Moz Au\***
  - Ore Reserve: 42Mt @ 1.20g/t Au for **1.61Moz Au\***
- All major exploration expenses complete – no additional drilling required – Operating Licence granted
- Exploration potential – orebody open, grade and widths increase with depth
- Strong economics – ore body from surface
- Simple CIL processing delivers ~92% recoveries
- Continuous ore zone, 30-40m thick, dipping at 40° means single open pit with moderate strip ratio (Stage 1 SR of 3.3)
- Modified, staged approach nearing licence approval

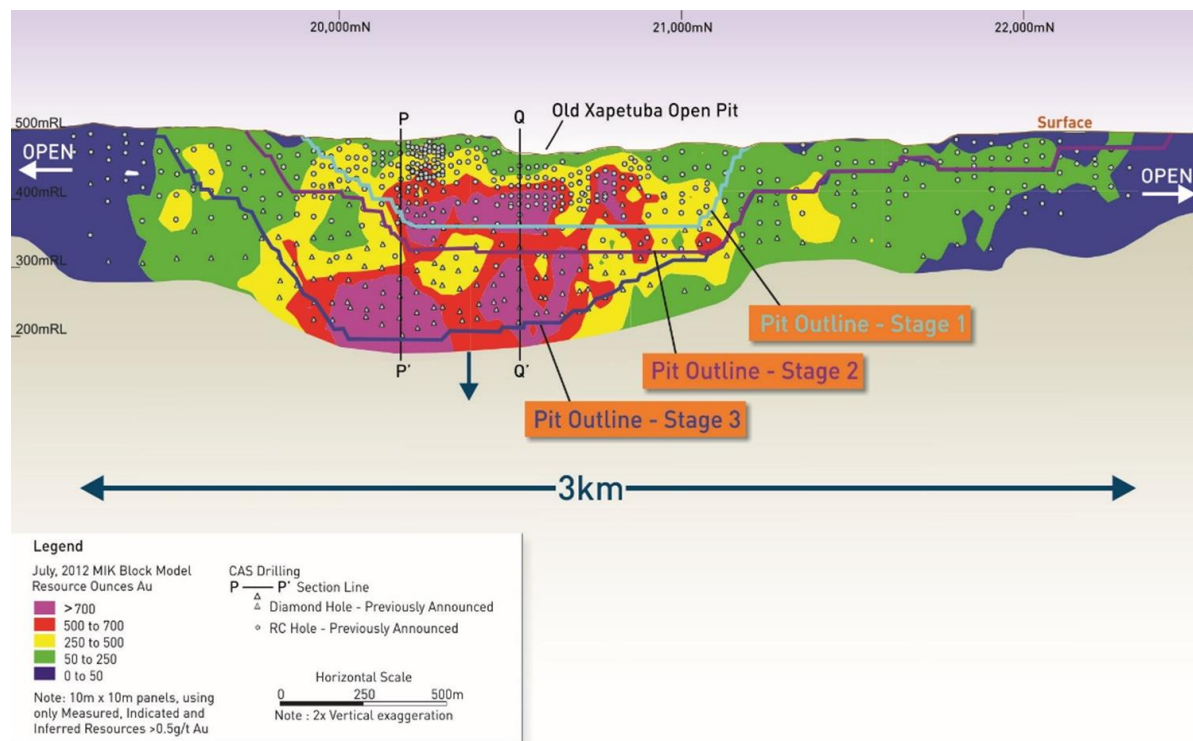


# Borborema Gold Deposit

Current Resource – 2.43Moz – Open at Depth



Wider and increasing grades with depth



# 95,000m Drilling Since Discovery

## Drilling highlights a highly continuous and reliable ore body ~ 3.5km long

- **16m @ 7.20 g/t Au** from 245m in CRDD-115  
- Including **7m @ 15.41 g/t Au** from 252m
- **16m @ 7.87 g/t Au** from 74m in CRRC-211  
- Including **3m @ 35.67 g/t Au** from 81m
- **18m @ 5.86 g/t Au** from 59m in CRRC-284  
- Including **7m @ 15.35 g/t Au** from 62m
- **17m @ 5.24 g/t Au** from 64m in CRRC-286  
- Including **4m @ 17.75 g/t Au**
- **15m @ 4.91 g/t Au** from 190m in CRDD-119  
- Including **3m @ 14.86 g/t Au**
- **22m @ 3.15 g/t Au** from 104m in CRRC-215  
- including **1m @ 26.30 g/t Au** from 161m
- **27m @ 8.49 g/t Au** from 278m in CRDD-138  
- including **5m @ 37.10 g/t Au**
- **26m @ 3.17 g/t Au** from 301m in CRDD-141  
- including **3m @ 18.46 g/t Au** from 308m
- **26m @ 2.73 g/t Au** from 294m in CRDD-136

**All sample secure and stored on site**



One of three corridors - Borborema core shed

# Borborema Gold - Studies

- Studies completed at Borborema include a Prefeasibility Study (PFS), draft Bankable Feasibility Study (BFS) and internal Scaled Development Analysis
- BFS was commissioned at a 4.2Mtpa processing rate - **US Spot Gold was +1450/OZ.**
- The BFS work suspended in 2014 due to concerns as to the US Gold Price negative movement
- Revised 2017 development plan – 2Mtpa** - throughput focused on the upper ore lens & pit depth of ~ 180m
- Optimises the resource at current prices, minimises waste movement, reduces capital and operational costs without sterilising the future development of the deeper reserves

PFS Summary Outcomes <sup>1</sup>	
In-Pit recoverable resource	27Mt @ 1.39g/t for 1.18Moz
Mining throughput rate	3Mtpa
Mine Life	9 years
Strip Ratio (LOM)	4.23:1
Metallurgical recovery	96%
Annual production	Up to 180kozpa (avg. 131kozpa)
Capital cost	US\$169m
Operating expense (opex)	US\$558/oz
Total operating costs (incl depn)	US\$735/oz

- Metallurgical test work commenced;
  - Confirm process flow sheet and optimise
  - Significantly reduce the capex and opex
- Crusader has committed to advance Borborema only if **market conditions are positive and reflect the true value of the project to stakeholders**

1. Refer to ASX announcement dated 15 September 2011 'Positive Pre-Feasibility at Borborema'. This document contained all the relevant disclosures at the time of PFS

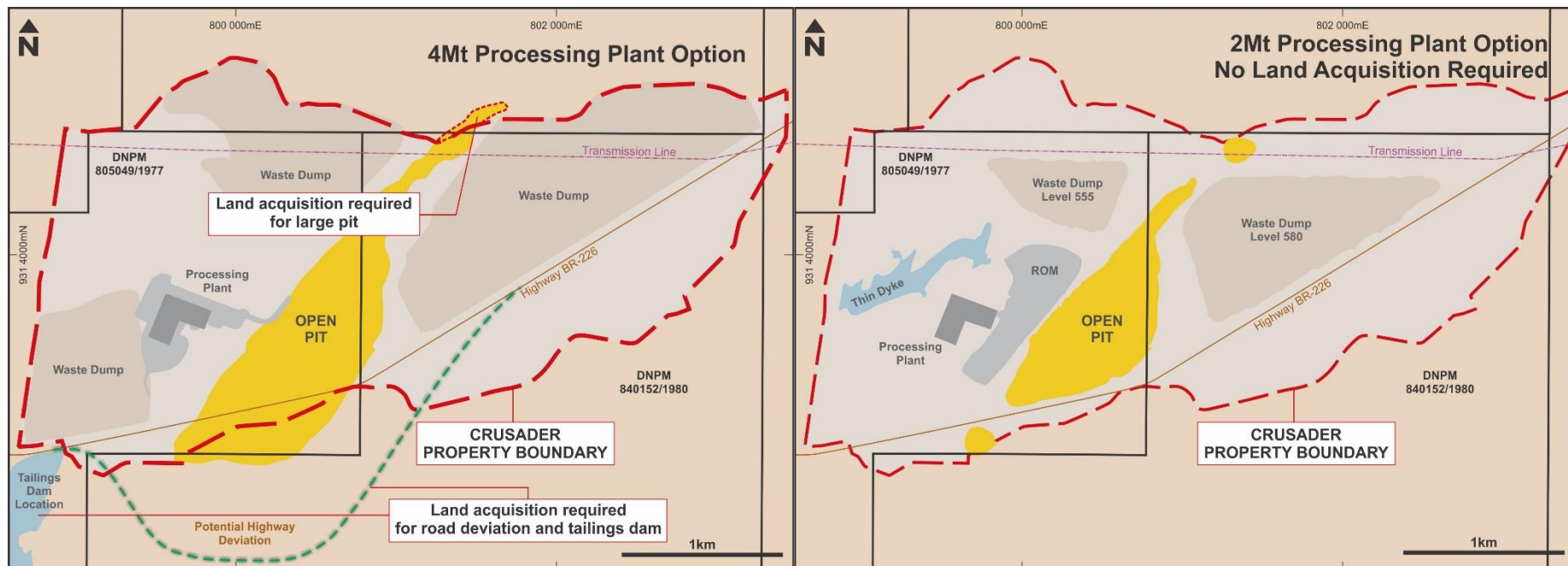
# Changes – How We Plan to Accelerate Development

---

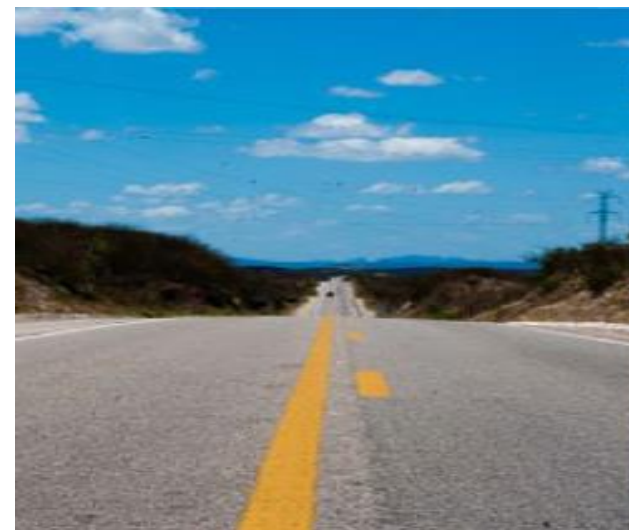
1. Throughput rate 2Mtpa - previously 4.2Mtpa
  - Significant initial and sustaining **Capex reductions**
  - Strip Ratio falls from 6.6 to 3.3- Waste movement alone falls 75% - 280Mt to 64Mt.
2. **Successful tailings testwork** - demonstrates dry stacking (co-deposition) is a viable option with *significant* economic and licensing implications;
  - Removal of the tailings dam- savings in initial and sustaining capital
  - **Project water balance is confirmed** - better recycling
  - Licensing is facilitated- environmentally more acceptable
3. Water Management - Lower throughput rate & tailings treatment means there is sufficient water available from the existing treated water licence at Currais Novos
4. Project footprint within Crusader farm limits - Reduced land acquisition & licensing costs
5. Avoiding the deviation of the power lines - Reduced capital costs & time delays
6. **Avoiding the highway deviation** - Reduced capital costs & approval process delays

# New Mine Plan Allows Development

- Borborema is a large gold project that can be developed in logical stages
- Stage 1 Borborema is expected to have a mine life between 8 and 10 years
- Simplified project development plan reduces capital costs and facilitates licensing which is in the final stages
- Stage 2 expansion to access the deeper (and still open) reserves and resources are not sterilised and are an option on the gold price
- Approvals for Stage 2 to be addressed during mining operations



- Borborema is in an ideal location for a mine development, and has no competing land use - **CAS 100% land owner**
- High level of existing support infrastructure:
  - Bitumen highway to mine gate (BR226), **140km to city (and port) of Natal**
  - **Grid power** lines traverse Crusader's tenements
  - 25km from **mining town of Currais Novos**
  - Water from town waste water treatment
- Mining-friendly regulatory environment:
  - Sudene tax concessions<sup>1</sup> may be available (overall tax rate of 15.25%)
  - Low government mineral royalties<sup>2</sup> - currently 1%
- Available & efficient logistics, labour and power infrastructure can significantly reduce project development and execution risk

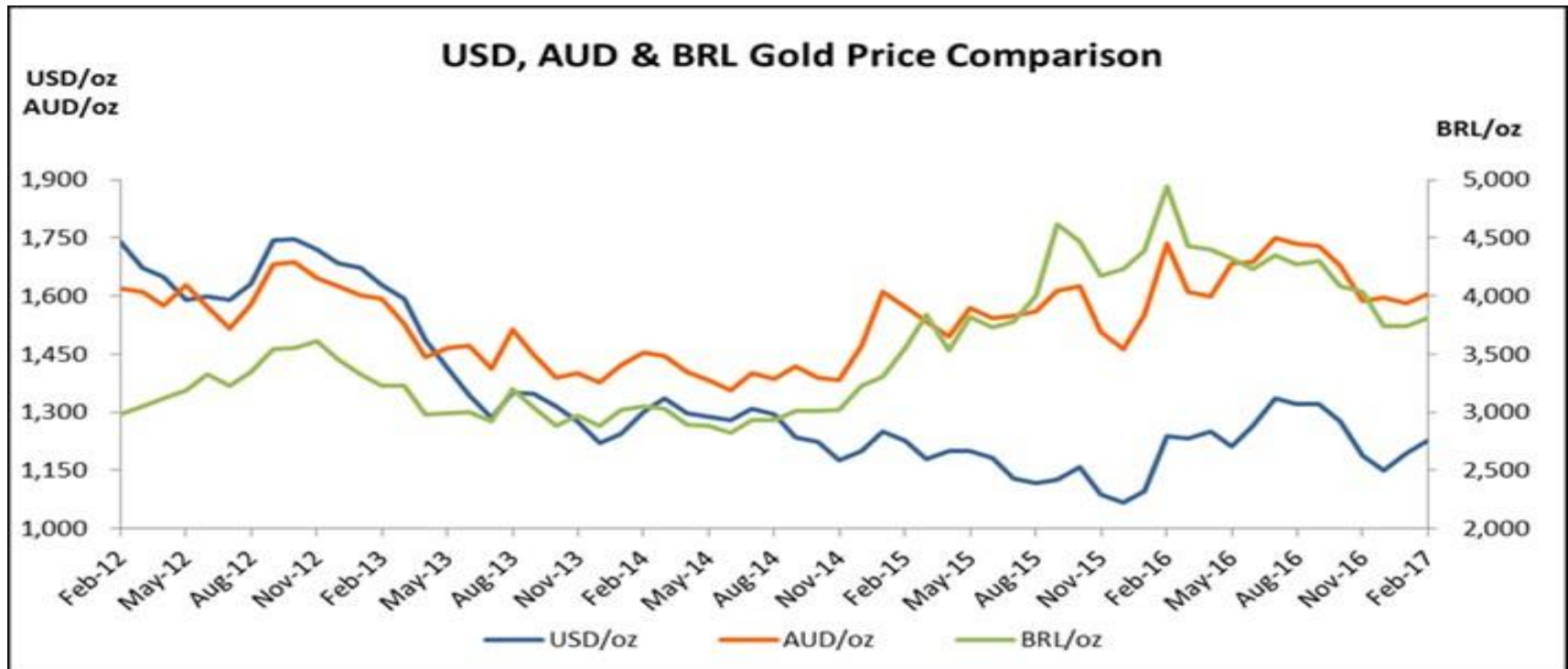


<sup>1</sup>A federal government economic stimulus scheme, called Sudene, provides significant benefits for businesses operating in the north east of Brazil, including Rio Grande do Norte. The scheme was introduced to boost economic activity in a relatively impoverished area of Brazil. Company tax rates are reduced from 34% to 15.25% for a period of 10 years. Other benefits include reduction in the rates of taxes such as goods and services taxes, sales taxes and import duties.

<sup>2</sup>The current rate of government royalty is 1% of sales revenue. There is also a 0.5% royalty payable to the landowners. Note that Crusader owns a number of farms in the immediate area including the one that covers the central part of the ore body.

# Economics in Brazil – It is time to develop Gold!

- There has been a significant movement in the Brazilian Real against the USD as well as the physical USD Gold Price
- Capital and operating costs will benefit from the exchange devaluation for locally sourced materials and services
- Global mining downturn positively impacts Brazilian cost profile due increased availability of skilled labour and price reductions available due to the depressed mining market and pressure on suppliers of services, equipment and consumables
- Sustained drop in the international oil price per barrel – Diesel price a significant savings



# Current Borborema Work Program

- Complete final licensing requirements for project development
- Complete current metallurgical test work program – 6 tonnes being processed – ALS Perth
- Complete revised BFS & present project for funding & development

Milestone	4Q 2016	1Q 2017	2Q 2017	3Q 2017	4Q 2017
Borborema Gold Project					
Mining and Environmental Permits	✓	✓			
Metallurgical Testwork	✓	✓	✓		
Final Engineering and Costing			✓	✓	
Bankable Feasibility Study				✓	✓

# Juruena Project - Grades up to 2,000 g/t GOLD

Alta Floresta - Location of a 1980's Gold Rush  
Now ready for modern exploration and development



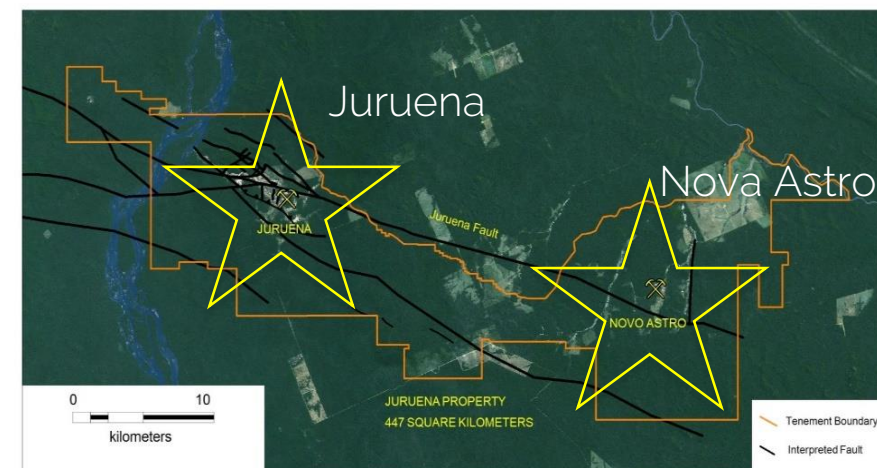
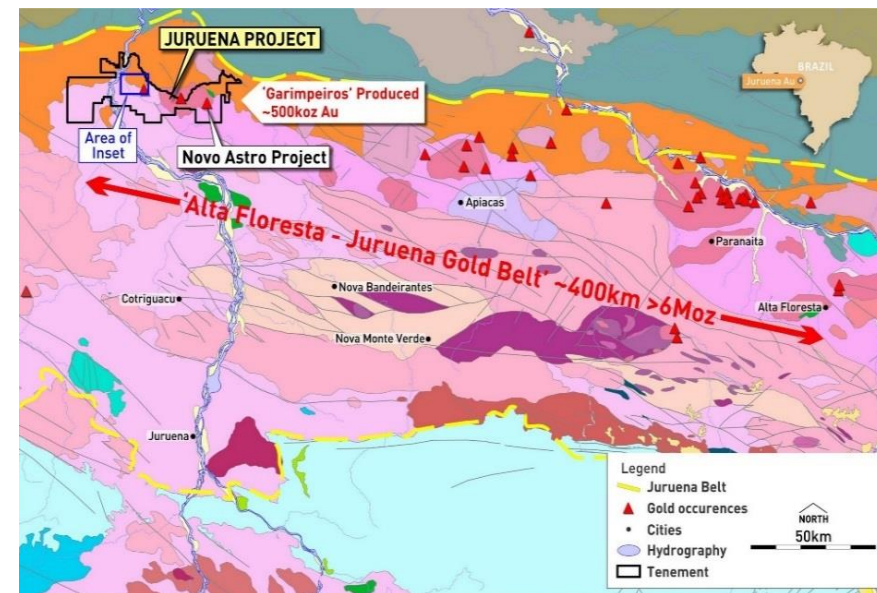
In Amazon Jungle, a Gold Rush Like None Before  
*New York Times* - April 25, 1988

"The men of Padeiro pay for a gun, a drink or a plane ride in gold, pure gold dust, like fresh produce just drawn from the soil."



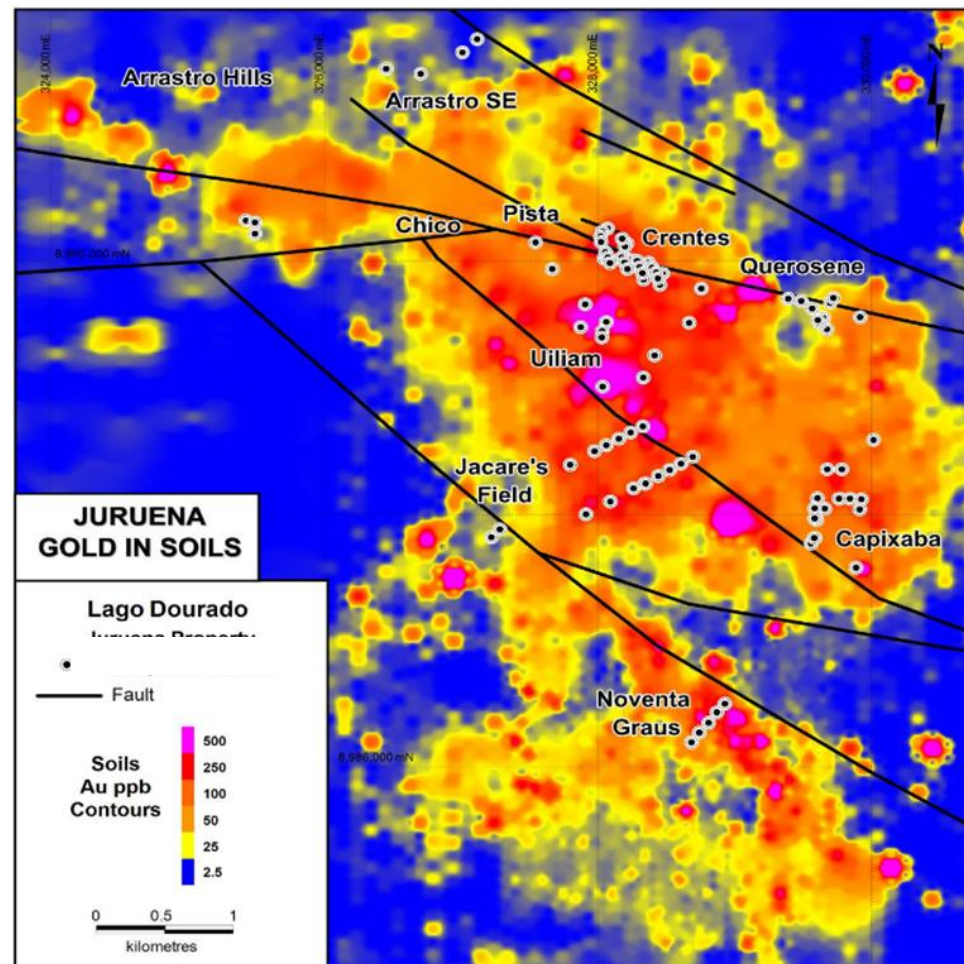
# Alta Floresta Gold Belt – Massively Under Explored

- Location - Alta Floresta Gold Belt - Central Brazil
  - Extensive granite/felsic volcanic belt stretching ~400km east-west
  - 7Moz produced 1979-1997 from 40 documented gold discoveries (DNPM)
- CAS controls 100% of 2 key areas- >500koz produced
  1. Juruena - closest to production
    - 20,000 strong garimpeiro gold rush -1980s
    - Only 4 of initial 16 immediate targets tested
      - JORC – 206koz @ 15 g/t Au\* – Open
  2. Novo Astro – Garimpeiros (artisanal) mining centre
    - 5km wide circular soil anomaly
    - Rock chips - 264 g/t Au and 101.7 g/t Au
    - Alluvial gold mining active ~ 40 years by local Brazilian garimpeiros. (Ongoing today)
    - Potential Multi-Moz target



# Juruena – Gold Targets – District Scale Opportunity

- Juruena gold soil anomaly is a 'giant', >8km long & 4km wide >50ppb
  - Footprint size suggests **district of gold projects**- Crusader systematically testing each area
  - Multi-element geochemistry completed on sampling, refined targeting using Cu, Ag, Bi, Mo, Fe trace elements
- Near-surface, high-grade gold mineralisation identified at Querosene, Dona Maria, Tatu and others
- Structurally controlled - regional mapping identified multiple untested controlling structures (e.g. Uiliam, Mauro, Tatu)



# Juruena Project – Overview

## Historically – Large Porphyry Target – +10Moz Target

- **1994 – 1998:** Explored by Madison JV
  - Diamond drilling – 15,822m in 91 holes - Aeromag – 10,600 line km, broad spaced
- **2006:** Acquisition of licences by Talon and GEOMIN - Limited Exploration
- **2009 - 2014:** Lago Dourado (TSX(V)) JV formed and purchased Juruena, exploration between 2009 -2013
  - Soils - 11, 499 samples - Rock chip – 802 samples;  
Auger drilling – 3,458m for 423 holes
  - RC drilling – 6,618m in 90 holes - Diamond Drilling – 22,018m in 70 holes (Total pre CAS - 44,458m)
- **Geophysics:** Aeromag – 2,600 line km, tight spaced, Gradient IP

USD\$25M spent pre-Crusader –  
Focused on large, deep Ore-Body.

## Crusader – acquires 100% - Changes focus to Higher Grade Exploration & Short Term Production

- **2014 – 2015:** 10,000m diamond and RC drilling
  - RC drilling – 7,749m; Diamond drilling - 1,863m; Auger drilling – 995m for 111 holes
  - Metallurgical testwork > 90% for gold and silver using standard leaching
- **2015:** JORC Resource estimate calculated for first 3 Targets
  - Inferred - 1.3Mt @ 5.6g/t for 234koz Au
- **2016:**
  - Diamond drilling – 8,000m - complete
  - High grade increases to 206koz @ 14.7g/t Au\*
  - Indicated resources average 18.3 g/t
  - Plant, licensing & key personnel required for initial production acquired or contracted
- **2017:** Targeting high-grade gold production!

\* Refer to Appendices for full Resource details

# Key Infrastructure – In Place

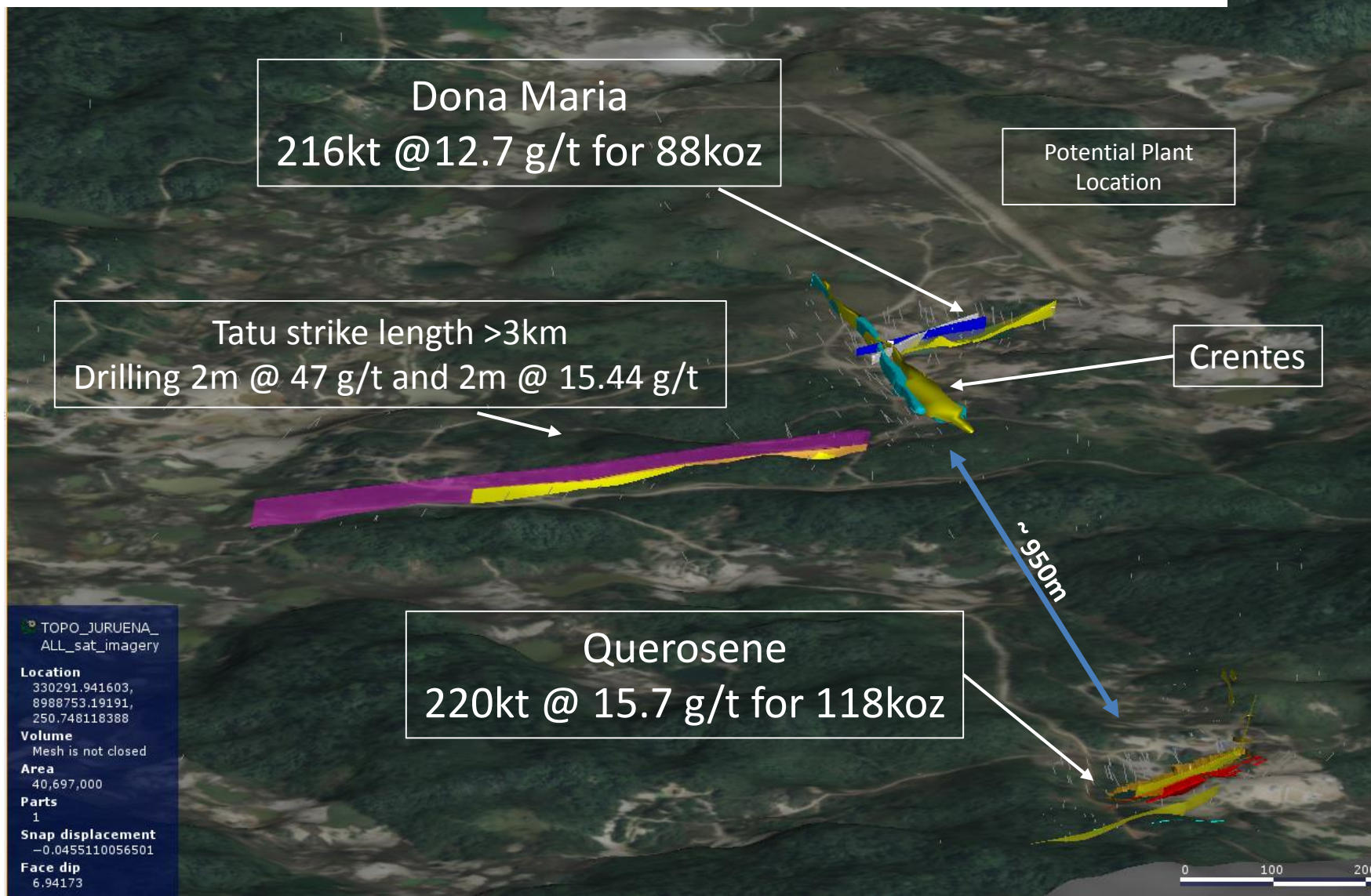


- Airstrip 1,000m
- Road access
- River (barge) access
- Core shed – 45,000m stored
- Diesel gen set power in place
- Dormitories  
60 man camp - modern & fully functional

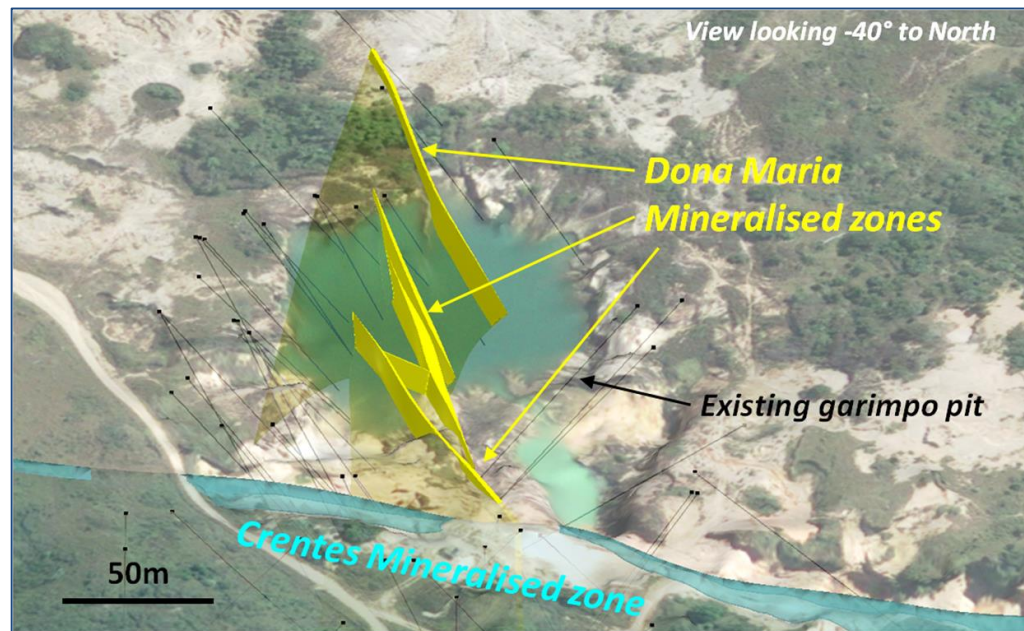
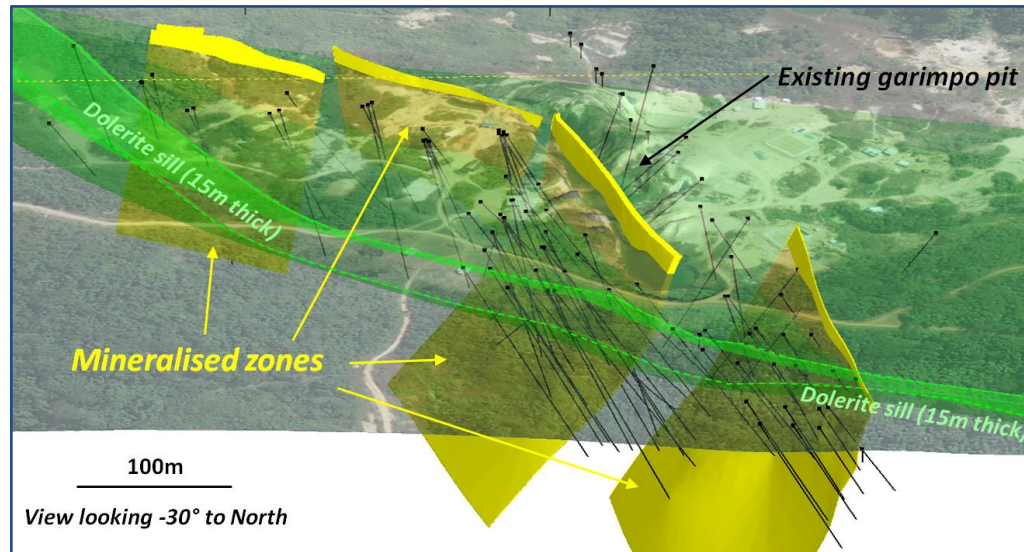


# Querosene and Dona Maria- the first of many?

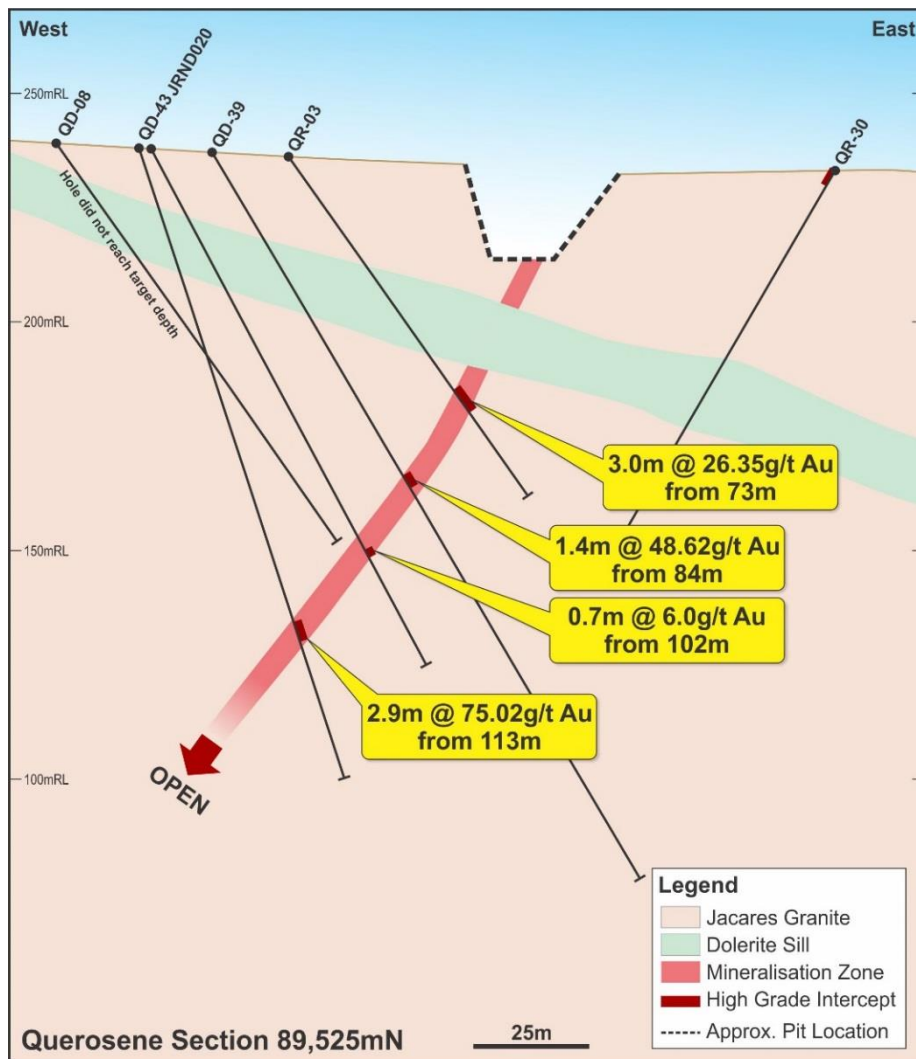
Past & present Garimpeiro workings help target Crusader Exploration



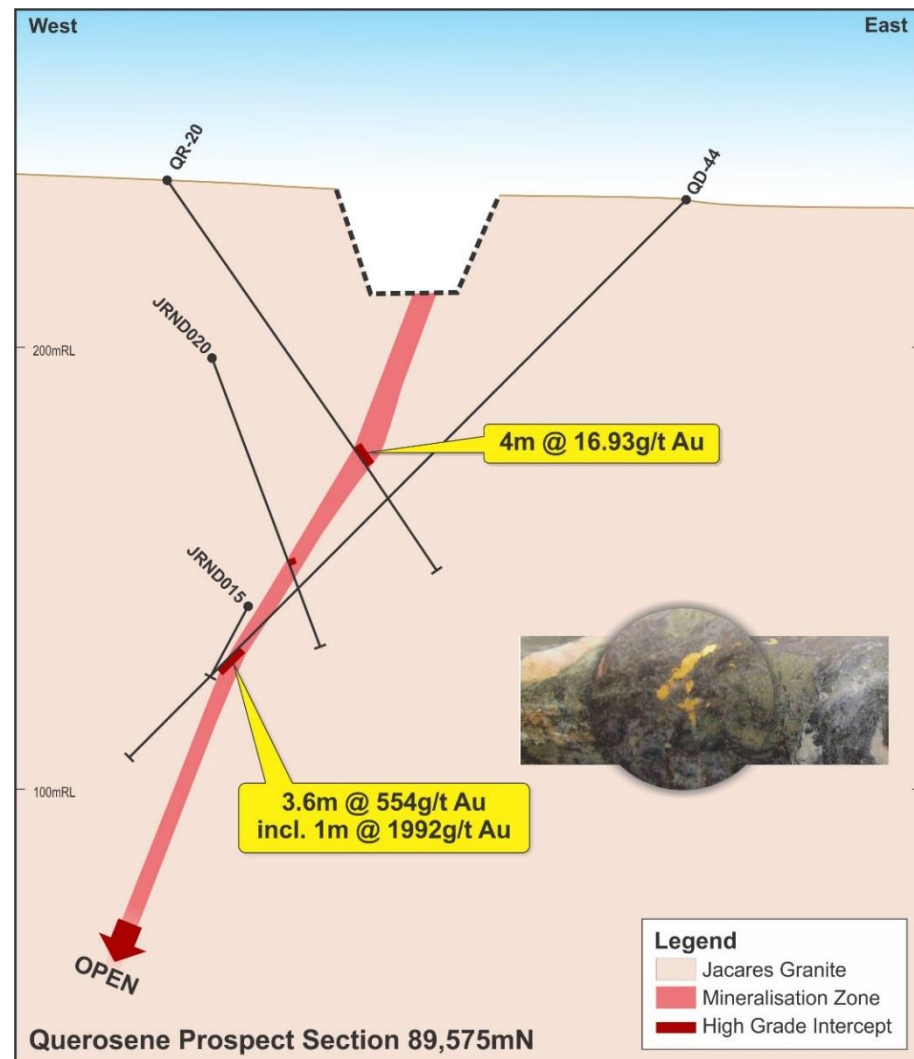
# Querosene & Dona Maria 3D Models



# Querosene Cross-Sections



Cross-section 525



Cross-section 575

- Will consider development following PEA-expected Q1 2017
- PEA considering initial mining of two open pits over Querosene and Dona Maria followed by underground mining operations
- Processing through central CIL beneficiation plant to produce gold doré bars
- Querosene and Dona Maria - suitable for long-term, narrow vein mining (the current preferred option is the cut and fill method)
- Similar metallurgical properties - mined and treated concurrently
- Crushing and screening plant secured. Capable of treating up to 100tph.



# Juruena Execution

---

Leverage off invaluable in-country experience to successfully bring Juruena into production in 2017

---

Two recent appointments bring over 70 years of in-country experience to the team:

## **Carlos Fonseca** (Engineering Consultant)

- Over 40 years' experience in the gold sector in Brazil
- Projects include Kinross Gold Corporation's Paracatu Mineração project, Luna Gold's Aurizona gold plant, Yamana's Fazenda Brasileira and the Amapari gold project (now owned by ASX listed Beadell Resources).

## **Luis Navarro** (Exploration Manager)

- Over 32 years' experience as a geologist
- Companies include Canadian-based Yamana Gold, Gold Fields do Brasil Ltda (a subsidiary of Gold Fields South Africa) and Western Mining Corporation (Mara Rosa gold mine).

# Posse Iron Ore Mine



- Lies at the centre of Belo Horizonte, “The Iron Quadrilateral”
- Fully licensed operation
- High value product mix – exceptionally low in contaminants
- Production for direct sale (DSO - Direct Shipping Ore)
- Dry processing (Crushing and Screening)
- All ore sold domestically in Brazil
- Started operating in March 2013 - sold \$36M into domestic market
- Cashflow from Posse has enabled Crusader to continue acquiring and developing Gold assets and opportunities in Brazil.

# Upcoming Milestones

There are a number of strong catalysts

Milestone	4Q 2016	1Q 2017	2Q 2017	3Q 2017	4Q 2017
<b>Borborema Gold Project</b>					
Mining and Environmental Permits	✓	✓			
Metallurgical Testwork	✓	✓	✓		
Final Engineering and Costing			✓	✓	
Bankable Feasibility Study				✓	
<b>Juruena Gold Project</b>					
High Grade Resource Definition Drilling	✓				
Updated Resource estimate	✓				
Scoping Study		✓			
Mining and Environmental Permits	✓	✓	✓		
Final Investment Decisions		✓			
Construction / Development			✓	✓	✓

# Board & Management

## Stephen Copulos

Non Executive Chairman

Businessman and investor with over 30 years experience in a wide range of industries. Experienced Director for both listed and private companies. Largest Crusader shareholder. Committed to increasing value per share.



## Rob Smakman

Managing Director

Highly experienced geologist and manager with over 20 years Australian & international experience. Founding director of Crusader, based in Brazil (+10 yrs) and fluent in Portuguese. Fellow – AusIMM.



## Paul Stephen

Executive Director

Founding director of Crusader, with over 20 years experience in the resources and financial services industries. Held senior positions and directorships at Integrated Fuel Services Pty Ltd, Montague Stockbrokers, Patersons Securities and Macquarie Bank.



## Jim Rogers

Non Executive Director

Globally respected investment expert, fund manager and author. Co-founded highly successful Quantum Fund. Former guest professor of finance at the Columbia Business School in New York. Author of multiple best-selling finance books.



## Mauricio Ferreira

Non Executive Director

Over 35 years natural resources experience. Brazilian national, former Vale executive. Involved in the exploration and development of three Brazilian gold projects.



## John Evans

Non Executive Director

Experienced Director and CA. Over 15 years in private sector finance executive roles. Currently Principal of a Business Broking & Corporate Advisory Practice. Chairman of Crusader's Audit & Remuneration Committees.



## Julio Nery

COO - Brazil

Brazilian Mining Engineer with 35 years experience in mining, mine planning and environmental management. Built and operated numerous large Brazilian mines, extensive permitting and CSR experience.



# Investment Highlights – Grass Roots to Production

## ■ Undervalued

- Transitioning from iron ore to gold production – will re-rate valuations
- Turnaround opportunity for investors
- Brazil is returning to investor favour – Significant recent transactions
- Significant value gap to peer group

## ■ Two Advanced Gold Projects

- **Borborema** – Can be developed quickly due to volume and quality of work completed & advanced permits in place
- **Juruena** – High Grade – Massive exploration potential funded through project cashflow

- **Proven ability** - Full management and operational team in place
- **Catalysts - 2017** – Milestone events achievable and imminent



## Head Office

Suite 1, Level 1,  
35 Havelock Street  
West Perth WA 6005  
Australia

## Site Office

Crusader do Brasil Mineração Ltda.  
Avenida do Contorno 2090  
Pilotis, Bairro Floresta - 30.110-012  
Belo Horizonte, MG, Brasil

## Company Contacts:

### **Rob Smakman**

Managing Director

Tel: +55 31 2515 0740

Email: [rob@crusaderdobrasil.com](mailto:rob@crusaderdobrasil.com)

### **Paul Stephen**

Executive Director

Tel: +61 8 9320 7500

Email: [paul@crusaderresources.com](mailto:paul@crusaderresources.com)

# Appendix 1 - Peer Comparison

Company	Code	Project Location	Status	Market Capitalisation (US\$m)	Enterprise Value (US\$m)	Mineral Resource (Moz)	Mineral Reserve (Moz)	EV/Resource (USD/Oz)	Resource Grade (g/t)	AISC (USD/oz)	Capex (US\$m)
Belo Sun	BSX (TSX)	Brazil	Development	\$650	\$565	6.1	3.8	\$92.6	1.0	\$780	\$300
Osisko Mining	OSK (TSX)	Canada	Advanced Expl.	\$485	\$365	5.2	0	\$70.2	2.3	N/A	N/A
Gold Road Resources	GOR (ASX)	Australia	Development	\$380	\$320	6.1	6.5	\$52.5	1.3	\$720	\$360
Wesdome Gold Mines	WDO (TSX)	Canada	Production	\$345	\$325	5	0.4	\$65.0	2.2 - 9	\$1,000	N/A
Integra Mining	ICG (TSX-V)	Canada	Development	\$300	\$270	4.1	0	\$65.9	9.1	\$555	\$65
Beadell Resources	BDR (ASX)	Brazil	Production	\$280	\$275	3.5	1.3	\$78.6	1.7	\$830 - \$930	N/A
Dacian Gold	DCN (ASX)	Australia	Development	\$260	\$240	3.3	1.2	\$72.7	2.3	\$779	\$165
Sabina Gold Corp.	SBB (TSX)	Canada	Development	\$245	\$215	7.1	2.5	\$30.3	6.3	\$620	\$620
Auryn Resources	AUG (TSX)	Canada	Advanced Expl.	\$205	\$175	3.1	0	\$56.5	7.7	N/A	N/A
Gascoyne Resources	GCY (ASX)	Australia	Development	\$140	\$102	2.4	0.5	\$42.5	1.4	\$705	\$65
Atlantic Gold Corp	AGB (TSX-V)	Canada	Development	\$130	\$120	2.2	0.8	\$54.5	1.6	\$520	\$105
Anfield Gold	ANF (TSX-V)	Brazil	Development	\$100	\$73	0.9	0	\$81.1	7.0	\$887	\$65
Marathon Gold	MOZ (TSX)	Canada	Advanced Expl.	\$99	\$97	1.2	0	\$80.8	2.3	N/A	N/A
Nighthawk Gold	NHK (TSX-V)	Canada	Advanced Expl.	\$82	\$72	2.1	0	\$34.3	1.6	N/A	N/A
Goldquest	GQC (TSX-V)	Dominican Rep.	Development	\$80	\$75	1.9	0.8	\$39.5	2.6	\$595	\$190
Eastmain Resources	ER (TSX)	Canada	Advanced Expl.	\$80	\$71	1.6	0	\$44.4	3.9	N/A	N/A
Troy Resources	TRY (ASX)	Guyana	Production	\$60	\$80	1.1	0.3	\$72.7	2.7	\$1,300	N/A
Corvus Gold	KOR (TSX)	U.S.A	Development	\$48	\$43	1.7	0	\$25.3	0.8	\$841	\$175
Serabi Gold Plc	SBI (TSX)	Brazil	Production	\$40	\$38	0.7	0	\$54.3	7.1	\$945	N/A
Capricorn Metals Ltd	CMM (ASX)	Australia	Advanced Expl.	\$40	\$38	0.9	0	\$42.2	1.1	N/A	N/A
Crusader Resources	CAS (ASX)	Brazil	Development	\$27	\$26	2.7	1.6	\$9.6	6.3 (Juruená) 1.1 (Borborema)	N/A	N/A

Source: Company exchange releases  
Crusader Research, as at 15 February 2017

## Appendix 2: Listed Brazilian Gold Companies by Market Cap.

Company	Code	Market Capitalisation (US\$m)	Enterprise Value (US\$m)	Mineral Resource (Moz)	Mineral Reserve (Moz)	Resource Grade
Kinross Gold Corporation	K-TSX	\$4,685	\$5,630	67.4	33.2	<b>0.70</b>
Yamana Gold Inc.	YRI-TSX	\$2,689	\$4,219	44.3	10.7	<b>1.50</b>
Eldorado Gold Corporation	ELD-TSX	\$2,609	\$2,996	36.9	20.6	<b>0.56</b>
Belo Sun Mining Corporation	BSX-TSX	\$324	\$259	6.8	3.8	<b>1.07</b>
Beadell Resources Limited	BDR-ASX	\$295	\$324	3.5	1.5	<b>1.68</b>
Trek Mining (Luna Gold Corp.)	LGC-TSX	\$63	\$109	2.2	1.0	<b>1.88</b>
Avanco Resources Limited	AVB-ASX	\$226	\$205	1.3	-	<b>1.98</b>
Brio Gold Inc.	BRIO-TSX	\$259	\$254	7.2	2.7	<b>2.35</b>
Gold Mining Inc	GOLD-TVX	\$178	\$171	18.2	-	<b>0.56</b>
Jaguar Mining Inc.	JAG-TSX	\$154	\$214	2.9	0.4	<b>4.07</b>
Anfield Gold Corp.	ANF-TVX	\$97	\$67	2.2	-	<b>1.78</b>
Aura Minerals Inc.	ORA-TSX	\$46	\$62	2.6	1.3	<b>0.62</b>
Serabi Gold Plc	SRB-AIMLSE	\$41	\$43	0.8	0.2	<b>7.93</b>
TriStar Gold	TSG-TVX	\$29	\$28	0.3	-	<b>2.06</b>
Crusader Resources Limited	CAS-ASX	\$25	\$26	2.7	1.6	<b>1.23</b>
Amarillo Gold Corporation	AGC-TVX	\$23	\$31	2.0	-	<b>1.30</b>
Rio Novo Gold Inc.	RN-TSX	\$24	\$25	2.7	0.8	<b>1.27</b>
Orinoco Gold Ltd.	OGX-ASX	\$22	\$22	0.1	0.0	<b>1.91</b>
Cleveland Mining Co. Ltd.	CDG-ASX	\$21	\$36	0.2	-	<b>1.99</b>
BBX Minerals Ltd.	BBX-ASX	\$13	\$13	-	-	<b>NA</b>
Centaurus Metals Ltd.	CTM-ASX	\$8	\$7	0.1	-	<b>8.56</b>
Equitas Resources Corp.	EQT-TVX	\$6	\$6	0.5	0.0	<b>0.82</b>

## Appendix 3: Borborema – JORC Resource & Reserves

### Borborema Gold Project – Mineral Resource by Multiple Indicator Kriging (MIK)

Category	Cut-off grade	Tonnes (Mt)	Grade (Au g/t)	Contained Gold (Moz)
Measured	0.50	8.2	1.22	0.32
Indicated	0.50	42.8	1.12	1.55
Total Measured + Indicated	0.50	51.0	1.14	1.87
Inferred	0.50	17.6	1.00	0.57
Total Mineral Resource	0.50	68.6	1.10	2.43

July 2012 Mineral Resource Summary Table, reported at a 0.5 g/t cut-off. Parent Block 25mE x 25mN x 5mRL. Selective Mining Unit 5mE x 6.25mN x 2.5mRL. Note, appropriate rounding has been applied, subtotals may not equal total figure.

### Borborema Gold Project – Maiden Ore Reserve (announced to ASX on 16 November 2012)

Category	Ore Type	Tonnes (Mt)	Grade (Au g/t)	Mineable Gold (koz)
Proven	Oxide	0.65	0.80	17
	Fresh	7.26	1.25	292
Probable	Oxide	1.68	0.70	38
	Fresh	32.82	1.20	1,260
Total		42.41	1.18	1,610

Ore Reserve estimate for the Borborema Gold Project.

Reported at a 0.4 g/t cut-off for oxide and 0.5g/t cut-off for fresh material. The cut-off grades have been based on the latest throughput costs, gold price of US\$1350/oz, metallurgical recovery of 95% and then rounded up. Note, appropriate rounding has been applied, subtotals may not equal total figures.

Juruena Gold Project					
JORC Compliant Inferred Mineral Resources –December 2016					
Prospect Name	Resource Category	Lower cut-off applied	Metric Tonnes	Resource Gold Grade (g/t)	Ounces of Gold
Dona Maria	Indicated	2.5 g/t cutoff	67,800	13.7	29,800
	Inferred		148,500	12.2	58,200
	sub-total		216,300	12.7	88,000
Querosene	Indicated	2.5 g/t cutoff	31,200	28.4	28,500
	Inferred		188,700	14.7	89,300
	sub-total		219,900	16.7	117,800
Total Indicated			99,000	18.3	58,300
Total Inferred			337,200	13.6	147,500
Total high-grade ounces			436,200	14.7	205,800
Crentes	Inferred	1.0 g/t cutoff	846,450	2.0	55,100
Total Combined			1,282,650	6.3	260,900

Note: Appropriate rounding applied. Table includes updated mineral resource estimates for Querosene and Dona Maria, Crentes remains the same as per the 2015 resource estimate.

## Appendix 5: Juruena - Metallurgy

### Querosene:

- Results for metallurgical testing on samples from the Querosene prospect indicate recoveries of > 90% for both gold and silver using standard leaching (see ASX release 1 July 2015)
- Results also indicate the gold and silver are free milling and well distributed within the ore

### Dona Maria:

- Metallurgical testwork at the Dona Maria prospect **recovered +90% gold** in standard leaching tests
- Various tests including leaching and leaching plus gravity at different grind sizes and leach times, recovered between **85.4% and 91.0% gold** (39.7% and 47.6% Ag)
- The 15kg sample which was composed of recent drill cuttings, had a head grade of 31.2 g/t gold and is indicative of the high grades observed at Dona Maria

# Appendix 6: Drilling Highlights to Date - Querosene

## Dec 2014

- **3m @ 26.35 g/t Au** from 73m in hole QR-03 including **0.5m @ 150.57 g/t Au** from 73m
- **2m @ 12.11 g/t Au** from 52m in hole QR-07

## March 2015

- **8m @ 6.27 g/t Au** from 80m in QR-20
- **2m @ 17.62 g/t Au** from 84m in QR-21
- **4m @ 3.78 g/t Au** from 86m in QR-24
- **1m @ 3.36 g/t Au** from 86m in QR-25

## May 2015

- **2m @ 32.97 g/t Au** from 82m in QR-20
- **1.50m @ 23.71 g/t Au** from 84m including **1m @ 34.26 g/t Au** from 84m in QR-21
- **1m @ 6.97 g/t Au** from 51m in QR-13
- **0.5m @ 8.96 g/t Au** from 56m in QR-15
- **1m @ 5.21 g/t Au** from 84m in QD-02

## July 2015

- **2m @ 9.6m g/t Au** from 48m in QR-28
- **0.5m @ 7.02 g/t Au** from 110.7m in QD-05

## August 2016

- **2.90m @ 75.02 g/t Au** from 112.80m in QD-043 including **0.45m @ 335 g/t Au**
- **1.40m @ 48.62 g/t Au** from 84.0m in QD-039 including **0.4m @ 87.96 g/t Au** & **0.64m @ 47.92 g/t Au**
- **1.47m @ 29.42 g/t Au** from 57.2m in QD-028
- **2.0m @ 11.09 g/t Au** from 113.9m in QD-030 including **1m @ 19.56 g/t Au**
- **1.02m @ 7.30 g/t Au** from 156.1m in hole QD-027
- **0.70m @ 6.00 g/t Au** from 102m in QD-041

## September 2016

- **3.6m\* @ 554 g/t Au** from 147m in QD-44 including **1m @ 1,992 g/t Au** from 148m

\*Note, this is not true width as hole was drilled sub-parallel to the ore zone. Estimated true width is 1.55m see further comments below

## Appendix 7: Drilling Highlights – Other Juruena Targets

### Dona Maria

#### July 2015

- ↗ **3.38m @ 47.97 g/t Au** from 183.62m in MD-01, including **1.87m @ 84.50 g/t Au** from 183.62m
- ↗ **12m @ 35.13 g/t Au** from 99m in MR-10, including **4m @ 75.07 g/t Au** from 99m

#### May 2015

- ↗ **16m @ 1.54 g/t Au** from 4m in MR-05
- ↗ **1m @ 6.52 g/t Au** from 126m in MR-06

#### August 2016

- ↗ **1.5m @ 141.36 g/t Au** from 45m in MD-06;
- ↗ **4m @ 8 g/t Au** from 96m (including **1m @ 27.99 g/t**) in MD-06; and
- ↗ **4m @ 3.98 g/t Au** from 77m (including **1m @ 11.09 g/t**) in MD-06

#### September 2016

- ↗ **10m @ 112 g/t Au** from 125m in MD-09
- ↗ **0.4m @ 2009 g/t Au** from 133m in hole MD-09
- ↗ **4.8m @ 11.89 g/t Au** from 101m in hole MD-10
- ↗ **4.0m @ 27.10 g/t Au** from 84m in hole MD-14

#### October 2016

- ↗ **8.25m @ 23.71 g/t Au** from 86.75m including: **1m @ 38.84g/t Au** from 90m;
- ↗ **1.5m @ 76.69 g/t Au** from 78m including: **1m @ 106.51 g/t Au** from 78m

### Crentes

#### July 2015

- ↗ **4m @ 5.19 g/t Au** from 12m and **12m @ 1.62 g/t Au** in CR-05

#### May 2015

- ↗ **16m @ 3.11 g/t Au** from 32m in CR-08
- ↗ **1m @ 20.6 g/t Au** from 49m in CR-05
- ↗ **12m @ 3.71 g/t Au** from 68m and **4m @ 3.42 g/t Au** from 87m in CR-07

### Capixaba

#### July 2015

- ↗ **3m @ 4.30 g/t Au** from 32m in CXR-04
- ↗ **2m @ 8.28 g/t Au** from 62m in CXR-09
- ↗ **4m @ 8.26 g/t Au** from 60m in CXR-13

## Appendix 8: Tatu – Next Resource?

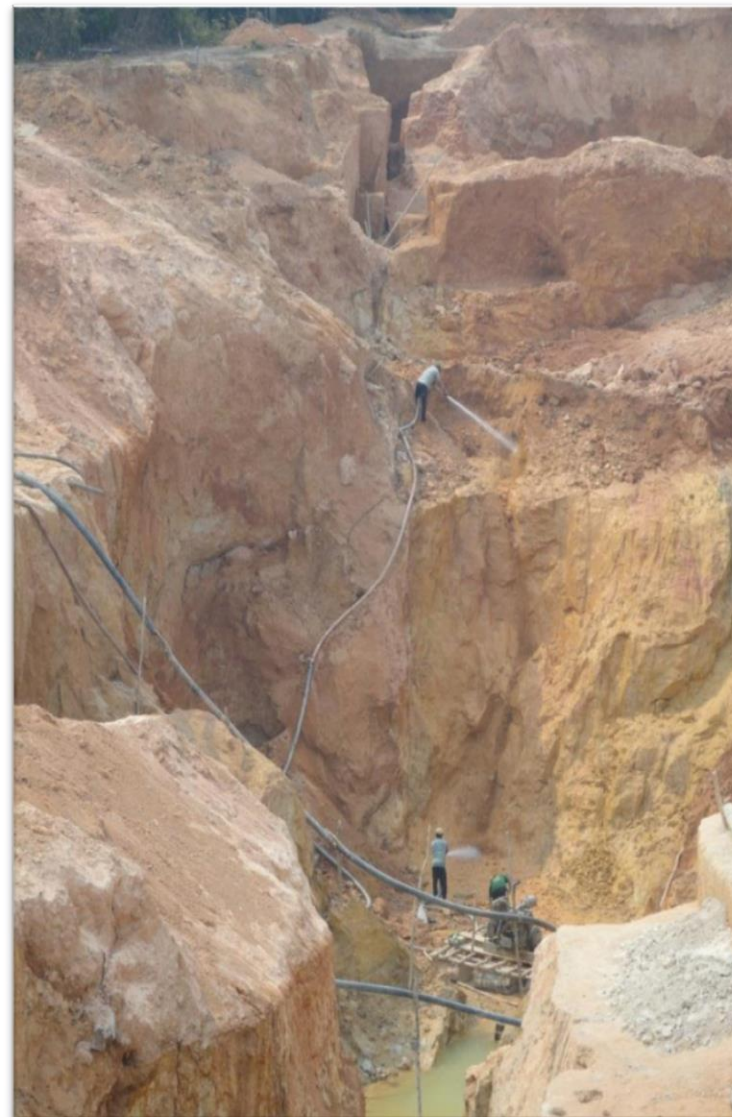
- New mineralised zone drilled at Tatu NE (within the Juruena Gold Project) intercepts broad new zone of shallow mineralisation
- Crusader expects Juruena to continue to grow into multiple prospects feeding into a central processing facility

### Tatu NE

- 37<sup>1</sup> m @ 3.71 g/t Au from 132m in TD-06, including 2m @ 47.67 g/t Au from 138m and 2m @ 15.44 g/t Au from 166m downhole

### Tatu

- 0.5m @ 14.00 g/t Au from 92m in hole TD-01
- 1.16m @ 14.99g/t Au from 94m in hole TD-02
- 0.5m @ 31.12 g/t Au from 117m in hole TD-04



1 Not true width. Tatu NE mineralisation is interpreted to be dipping sub-parallel to the drill hole TD-06. True width is estimated at ~15m.