

## Crusader Operations Update

Crusader Resources Limited (ASX: CAS, AIM: CAS) is pleased to announce the following updates in relation to the Company's Brazilian projects.

### **Borborema Gold Project**

Following the announcement on 20 August 2018 on the Borborema Gold Project ("Borborema" or the "Project") Bankable Feasibility Study ("BFS"), the Company has a number of updates to report as detailed below.

#### *Installation Permit*

As announced on 28 April 2017 (updated on 30 July 2018), the Company was granted the critical Pre-Licence (Licença Previa or 'LP') for Borborema from the Rio Grande do Norte State Government Environmental Department (IDEMA).

The Company has been working closely with IDEMA to ensure that the permitting process is completed efficiently and intends to submit the final application for the installation permit for its Borborema Gold Project middle November.

The Project's 2.0Mtpa processing plant design required for the installation permit is expected to be finalised before the end of October 2018 by the Belo Horizonte office of Ausenco do Brasil Engenharia Ltda ("Ausenco"). The Company will announce the results of this design work once Ausenco have finalised it. In addition, the remaining outstanding items required for the permit have been identified and are being finalised ahead of the November permit submission.

The Company has been advised by IDEMA that the approval of an installation permit would typically be provided within three months of submission and is expected to be received well in advance of completion of the Borborema BFS.

As the Company already has the environmental licence, and subject to the Company's on-going construction financing conversations, once the installation permit has been received, the Company will be in a position to commence construction of the Boborema Mine.

#### *Metallurgy*

The Company is pleased to provide the following updates on the on-going Borborema metallurgical test work being undertaken in Perth by Orway Mineral Consultants ("OMC") since the 20 August 2018 announcement.

The comminution test work has indicated that Project ore can achieve a 2.0 Mtpa throughput rate at grind sizes of 80% of the material a grinding size of 106µm, would be sufficient to ensure targeted gold recoveries. The impact of the increased grind size on the power requirements are significant and are expected to have a positive impact on the AISC of the project once in operation.

Crusader confirms that the optimisation work undertaken to date and disclosed in this announcement does not materially change any of the material assumptions and technical parameters underpinning the Company's previously announced mineral resource and ore reserve estimates. Following completion of the Company's optimisation work and BFS, if there are any material changes to these material assumptions or technical parameters, the Company will release all information required under the Listing Rules, the AIM Rules and the JORC Code 2012.

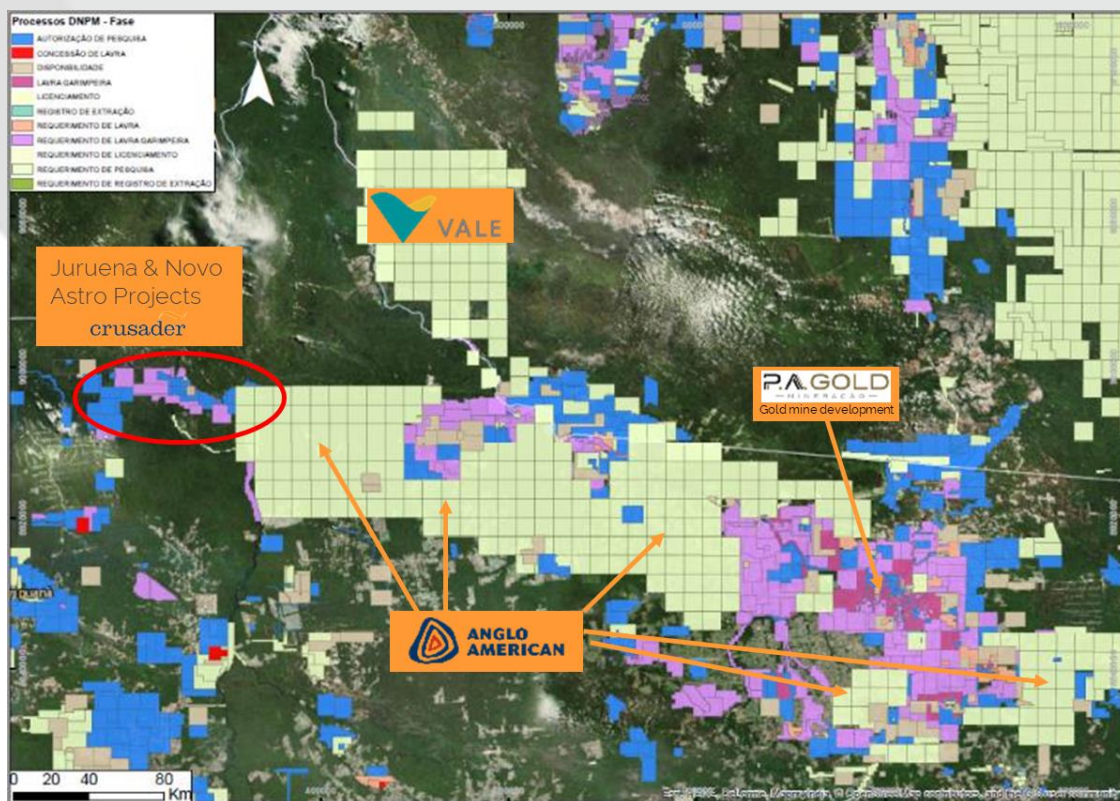
*Bankable Feasibility Study*

Crusader has finalised its shortlist of Brazilian based external engineering consultants for the BFS as well as the detailed scope of work required and has issued the request for proposals with a view to appointing a BFS partner in November 2018 and having a final copy of the BFS for the 2Mtpa throughput project available at the end of Q1 2019.

**Juruena Gold Project**

The Company is pleased to announce that it is pursuing the potential of a farm-in transaction in light of Crusader’s core focus of developing Borborema. The Company has already received initial expressions of interest with regard to third parties interested in partnering with Crusader in developing its 100% owned Juruena Gold Project (“Juruena”) in the state of Mato Grosso in Brazil.

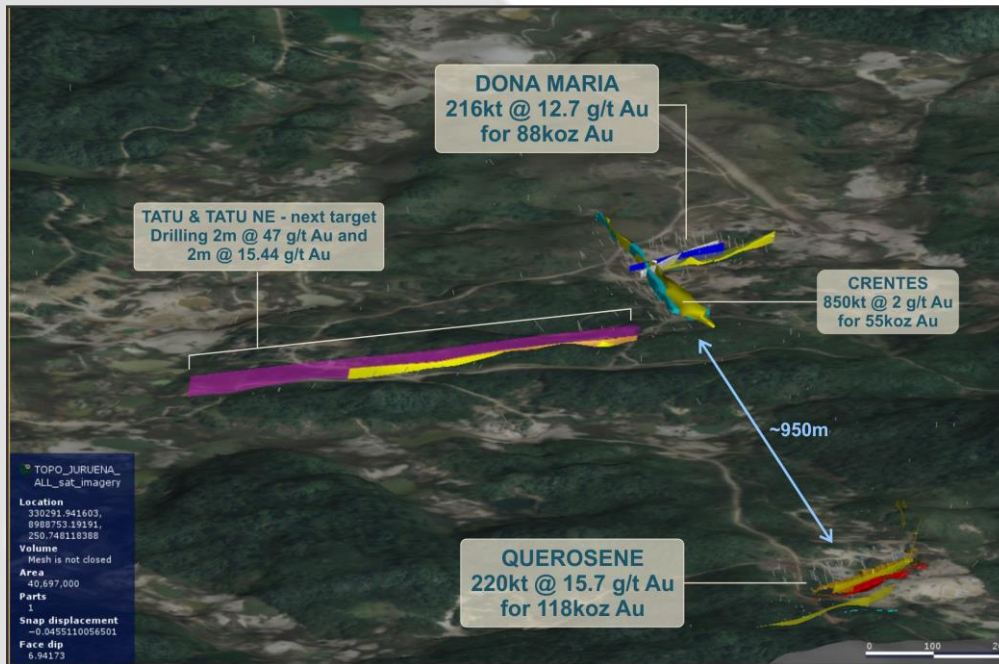
The Juruena project is located on the western end of the highly prospective Juruena-Alta Floresta gold belt and comprises a circa 770km<sup>2</sup> area of contiguous tenements. The Alta Floresta belt has recently seen significant activity from multi-nationals and is estimated to have produced more than 7Moz of gold, primarily from artisanal miners.



**Figure 1: Juruena is situated on the western end of the highly prospective Alta Floresta Gold Belt**

The Juruena campsite includes site offices, housing and catering amenities for a 60-person crew, a core shed and its own 1,000m airstrip.

Gold mineralisation defined at Juruena is hosted by steeply dipping narrow high-grade quartz veins and discrete zones of sheeted quartz veins, stockworks and breccias, within an intrusive suite of granitic to micro-granitic rocks, and rhyolite in the south-western part of the project, with overall low metamorphic grade. The exact width of the mineralised zones is variable between 20cm and 3m with respect to the narrow vein type and up to 30m for the sheeted veins.



**Figure 2: Major Prospects at Juruena Gold Project**

The Juruena Project has a 2012 JORC Code Compliant Mineral Resource estimate of 1.3Mt for 261koz Au at 6.3g/t over three key prospects, namely Crentes (55koz), Querosene (118koz) and Dona Maria (88koz). The Resource estimate includes a total of 206koz at 14.7g/t.

The project includes a number of significant gold intercepts, including 112g/t over 10m (Refer to ASX announcement dated 21 September 2016) and 35.1g/t over 12m (Refer to ASX announcement dated 1 July 2015). A total of over 55,000m of drilling has been completed to date at the Project. (Refer to ASX announcements of 29 September 2015 and 22 December 2016 for full table of significant intercepts).

### *Juruena Exploration*

The Company has successfully obtained an extension to our Juruena exploration tenements for a further three years from the Brazilian National Department of Mineral Production (DNPM), being 866.934 / 2012-LAGO DOURADO MINERAÇÃO LTDA ALVARÁ N ° 15.687 / 2015 and 866.105 / 2013-LAGO DOURADO MINERAÇÃO LTDA ALVARÁ N ° 15.615 / 2015.

### Posse Mine Action

The Company has been included in an environmental action by the Public Ministry with regard to non-compliance of certain environmental submissions and regulations with regard to the Posse Iron Ore Mine sold by the company in 2017. We have met with the Public Ministry in this regard and are negotiating a settlement which would not be deemed material. For completeness, the Company cautions that there is no certainty that a settlement may be reached.

### **Marcus Engelbrecht, Managing Director of Crusader said:**

*“The Company has advanced the work streams significantly on the Borborema Gold project BFS and remains confident that the results will confirm our view that this will result in a positive decision to commence construction and allow us to finalise our project finance discussions. In tandem, the Company is also looking at opportunities to develop our 100% owned Juruena Gold project and to progress the project up the value curve and to realise value. There has been an increasing and significant level of interest across the Alta Floresta mineral belt and in particular, our 100% owned Juruena Gold Project.”*



**For further information, please contact:****Investor Relations**

Office (Aus): +61 8 9320 7500

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

**Andrew Beigel****Company Secretary**

Office (Aus): +61 8 9320 7500

Email: [andrew.beigel@crusaderresources.com](mailto:andrew.beigel@crusaderresources.com)

**Hannam & Partners****Joint Broker**

Neil Passmore / Andrew Chubb / Ernie Bell

+44 (0)20 7907 8500

**Camarco****Financial PR**

Gordon Poole / Nick Hennis / Monique Perks

+44(0)20 3757 4997 / +44(0)20 3781 8330

**Pinnacle Corporate Finance**

Office: +61 8 6141 6306

Email: [ejonsson@pinnaclecf.com.au](mailto:ejonsson@pinnaclecf.com.au)

Ref: Crusader Resources Limited

**Appendix**
**Table 1: Borborema Gold Project Ore Reserve (JORC 2012 code)**

<b>Borborema Gold Project – Ore Reserve</b>				
<b>Category</b>		<b>Tonnes (Mt)</b>	<b>Grade (Au g/t)</b>	<b>Gold to Mill (koz)</b>
<b>Proven</b>	<b>Oxide</b>	0.65	0.80	17
	<b>Fresh</b>	7.26	1.25	292
<b>Probable</b>	<b>Oxide</b>	1.68	0.70	38
	<b>Fresh</b>	32.82	1.20	1,260
<b>Total</b>		<b>42.41</b>	<b>1.18</b>	<b>1,610 (1.61 Moz)</b>

Ore Reserve estimate for the Borborema Gold Project. Reported at a 0.4 g/t cut-off for oxide and 0.5 g/t cut-off for fresh material. The cut-off grades have been based on the latest throughput costs, gold price of US\$1,210/oz. Note, appropriate rounding has been applied, subtotals may not equal total figures.

**Table 2: Borborema Gold Project Mineral Resource (JORC 2012 code)**

<b>Borborema Gold Project Mineral Resource by Multiple Indicator Kriging (MIK)</b>				
<b>Category</b>	<b>Cut-off grade</b>	<b>Tonnes (Mt)</b>	<b>Grade (Au g/t)</b>	<b>Contained gold (Moz)</b>
<b>Measured</b>	0.40	9.8	1.09	0.34
	<b>0.50</b>	<b>8.2</b>	<b>1.22</b>	<b>0.32</b>
	0.60	6.8	1.35	0.30
<b>Indicated</b>	0.40	53.1	0.99	1.70
	<b>0.50</b>	<b>42.8</b>	<b>1.12</b>	<b>1.55</b>
	0.60	34.8	1.26	1.41
<b>Total Measured and Indicated</b>	0.40	62.9	1.01	2.04
	<b>0.50</b>	<b>51.0</b>	<b>1.14</b>	<b>1.87</b>
	0.60	41.7	1.27	1.70
<b>Inferred</b>	0.40	23.2	0.87	0.65
	<b>0.50</b>	<b>17.6</b>	<b>1.00</b>	<b>0.57</b>
	0.60	13.6	1.14	0.49
<b>Total Mineral Resources</b>	0.40	86.1	0.97	2.69
	<b>0.50</b>	<b>68.6</b>	<b>1.10</b>	<b>2.43</b>
	0.60	55.2	1.24	2.20

Mineral Resource estimate for the Borborema Gold Project, reported at various cut-offs. 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 figures.

**Table 3: Juruena Gold Project Mineral Resource estimate (JORC 2012)**

Prospect Name (Mineral Resources Category)	Resource Category	Lower cut-off (g/t Au)	Tonnes (t)	Grade (Au g/t)	Contained gold (oz)
Dona Maria	Indicated	2.5	67,800	13.7	29,800
	Inferred	2.5	148,500	12.2	58,200
<b>Dona Maria - Subtotal</b>			<b>216,300</b>	<b>12.7</b>	<b>88,000</b>
Querosene	Indicated	2.5	31,200	28.4	28,500
	Inferred	2.5	188,700	14.7	89,300
<b>Querosene – Subtotal</b>			<b>219,900</b>	<b>16.7</b>	<b>117,800</b>
<b>Total Indicated</b>			<b>99,000</b>	<b>18.3</b>	<b>58,300</b>
<b>Total Inferred</b>			<b>337,200</b>	<b>13.6</b>	<b>147,500</b>
<b>Total high grade ounces</b>			<b>436,200</b>	<b>14.7</b>	<b>205,800</b>
Crentes	Inferred	1.0	846,450	2.0	55,100
<b>Total combined Inferred Mineral Resource</b>			<b>1,282,650</b>	<b>6.3</b>	<b>260,900</b>

**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. For further information, please see the section below: Summary of Resource Estimate and Reporting Criteria.

#### About Crusader

Crusader Resources Limited (ASX:CAS, AIM:CAS) is a minerals exploration and development company listed on the Australian Securities Exchange and the AIM Market of the London Stock Exchange. Its major focus is Brazil; a country Crusader believes is vastly underexplored and which offers high potential for the discovery of world class mineral deposits.

Crusader has two key gold assets:

#### Borborema Gold Project

The Borborema Gold Project is in the Seridó area of the Borborema province in north-eastern Brazil. It is 100% owned by Crusader and consists of three mining leases covering a total area of 29 km<sup>2</sup> including freehold title over the main prospect area.

The Borborema Gold Project benefits from a favourable taxation regime, existing on-site facilities and excellent infrastructure such as buildings, grid power, water, sealed roads and is close to major cities and regional centres. The project's Ore Reserve includes Proven and Probable Ore Reserves of 1.61Moz of mineable gold from 42.4Mt @ 1.18 g/t (0.4 & 0.5 g/t cut-offs for oxide & fresh). The measured, indicated and inferred Mineral Resource Estimate of 2.43Moz @ 1.10 g/t gold, remains open in all directions.

#### Juruena Gold Project

The Juruena Gold Project is located in the highly prospective Juruena-Alta Floresta Gold Belt, which stretches east-west for >400km and has historically produced more than 7Moz of gold from 40 known gold deposits. Historically there is a database of more than 30,000 meters of drilling and extensive geological data.

#### Competent Person Statements

##### *Juruena mineral resource estimate*

The information in this announcement that relates to the Mineral Resource estimate for the Juruena Project was first reported in accordance with ASX Listing Rule 5.8 on 22 December 2016. Crusader confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 22 December 2016 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed.

##### *Juruena exploration results*

The information in this announcement that relates to exploration results for the Juruena Project was first reported in accordance with ASX Listing Rule 5.7 on 1 July 2015, 29 September 2015, 21 September 2016 and 22 December 2016. Crusader confirms that it is not aware of any new information or data that materially affects the information included in these previous announcements.

***Borborema mineral resource estimate***

The information in this announcement that relates to the mineral resource estimate for the Borborema Project was first reported in accordance with ASX Listing Rule 5.8 on 24 July 2017. Crusader confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 24 July 2017 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate continue to apply and have not materially changed.

***Borborema ore reserve estimate***

The information in this announcement that relates to the Ore Reserve estimate for the Borborema Gold Project was first reported in accordance with ASX Listing Rule 5.9 on 6 March 2018, 29 March 2018 and 11 April 2018. Crusader confirms that it is not aware of any new information or data that materially affects the information included in these previous announcements and that all material assumptions and technical parameters underpinning the Ore Reserve estimate continue to apply and have not materially changed.

***Borborema Exploration results***

The information in this announcement that relates to exploration results for the Borborema Gold Project was first reported in accordance with ASX Listing Rule 5.7 on 28 January 2015. Crusader confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 28 January 2015.