Advancing the Phoenix Gold Project to Commercial Production
Cautionary Statements Regarding Forward-Looking Statements and Cautionary Notes

All statements, other than statements of historical fact, contained or incorporated by reference in or made in giving this presentation and responses to questions, including but not limited to any information as to the future performance of the Company, constitute “forward-looking statements” and “forward looking information” (collectively, “forward-looking statements”) within the meaning of applicable Canadian and United States securities legislation. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “amenability,” “anticipates,” “assumption,” “base case,” “confident,” “believe,” “compelling,” “conceptual,” “contingency,” “consideration,” “contemplate,” “conversion,” “demonstrate,” “drive,” “encouraging,” “envision,” “evaluate,” “estimates,” “expected,” “exploration,” “factors,” “focus,” “forecast,” “forward,” “future,” “intend,” “IRR,” “inventory,” “LOM,” “margin of error,” “may,” “measures,” “mineable,” “mitigation,” “model,” “NPV,” “opportunity,” “optimize,” “path,” “PEA,” “plan,” “potential,” “preliminary,” “profile,” “project,” “projected,” “prospective,” “risk,” “sensitivity,” “slated,” “strategy,” “target,” “upgrade,” “upside,” “valuation,” “viability” and “will,” or variations of such words, and similar such words, expressions or statements that certain actions, events or results can, could, may, should, will (or not) be achieved or occur in the future. In some cases, forward-looking information may be stated in the present tense, such as in respect of current matters that may be continuing, or that may have a future impact or effect. Forward-looking statements include, but are not limited to, statements regarding mineral resource estimates, mine plans and life, the anticipated timing of the delivery and details of the updated Technical Report and/or updated mineral resource estimate for the Project, the results of the New PEA (including any anticipated economics, such as return on capital (including IRR) and NPV, free cash flow, gold production (payable or otherwise), capital and operating costs, LOM, estimated tonnes and grade, mineable inventory, construction period and other results of the New PEA, all of which are estimates only), impact of infrastructure on the economics of the New PEA, impact of results from the 2018 test mining and bulk sampling on the New PEA, the anticipated outcome of further oriented infill and expansion drilling of the Project, the potential tonnage of mineralized material and its grade from the Project, the impact of the data from the 2019 drilling program, the potential to improve the quantities and classification of mineral resource estimates, the potential impact of drilling on stope dimensions, future mining, Project economics and the understanding of the structural geology including at depth, and any potential to move the Project back into production. See also the Endnotes to this presentation. Forward-looking statements are made as of the date of this presentation based on the expectations, assumptions, opinions and estimates of management as of the date such statements are made, which management considers reasonable, and represent management’s best judgment. If such expectations, assumptions, opinions and estimates prove to be incorrect, actual and future results may be materially different than expressed or implied in the forward-looking statements. Forward-looking statements are subject to a number of known and unknown risks, uncertainties and other factors which may cause Rubicon’s actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others: possible variations in mineralization, grade or recovery or throughput rates; uncertainty of mineral resource estimates; inability to realize exploration potential, mineral grades and mineral recovery estimates; actual results of current exploration activities; actual results of reclamation activities; uncertainty of future operations, delays in completion of exploration plans for any reason including insufficient capital, delays in permitting, and labour issues; conclusions of future economic or geological evaluations; changes in project parameters as plans continue to be refined; failure of equipment or processes to operate as anticipated; accidents and other risks of the mining industry; delays and other risks related to operations; timing, receipt and maintenance of permits and other required regulatory approvals; the ability of Rubicon and other relevant parties to satisfy regulatory requirements; the ability of Rubicon to comply with its obligations under material agreements including financing agreements; the availability of financing for proposed programs and working capital requirements on reasonable terms; the ability of third-party service providers to deliver services on reasonable terms and in a timely manner; risks associated with the ability to retain key executives and key operating personnel; cost of environmental expenditures and potential environmental liabilities; dissatisfaction or disputes with local communities or First Nations or Aboriginal Communities; failure of plant, equipment or processes to operate as anticipated; market conditions and general business, economic, competitive, political and social conditions; our ability to generate sufficient cash flow from operations or obtain adequate financing to fund our capital expenditures and working capital needs and meet our other obligations; the volatility of our stock price; the ability of our common stock to remain listed and traded on the TSX; and the “Risk Factors” in the Company’s annual information form dated March 22, 2019 (“2019 AIF”). The foregoing list of assumptions, risks, uncertainties and other factors is not exhaustive. The foregoing list of assumptions, risks, uncertainties and other factors is not exhaustive. The forward-looking statements contained or incorporated by reference herein are expressly qualified by this cautionary statement as well as those in other continuous disclosure documents of the Company filed under its profile at www.sedar.com including, but not limited to, the Company’s news release dated August 19, 2019 and the 2019 AIF. Forward-looking statements contained herein are made as of the date of this presentation and Rubicon disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by applicable securities laws.

Qualified Person
The content of this corporate presentation relating to geology and exploration has been read and approved by George Ogilvie, P.Eng., President, CEO, and Director, who is a Qualified Person as defined by NI 43-101.

Cautionary Note to U.S. Readers Regarding Estimates of Measured, Indicated and Inferred Resources
This news release uses the terms “Measured” and “Indicated” Mineral Resources and “Inferred” Mineral Resources. The Company advises U.S. investors that while these terms are recognized and required by the Canadian Securities Administrators, they are not recognized by the United States Securities and Exchange Commission (SEC). The estimation of “Measured” and “Indicated” Mineral Resources involves greater uncertainty as to their existence and economic feasibility than the estimation of Proven and Probable Reserves. The estimation of “Inferred” Mineral Resources involves far greater uncertainty as to their existence and economic viability than the estimation of other categories of Mineral Resources. It cannot be assumed that all or any part of a “Inferred”, “Measured”, or “Indicated” Mineral Resource estimate will ever be upgraded to a higher category.

Under Canadian rules, estimates of “Inferred Mineral Resources” may not form the basis of feasibility studies, pre-feasibility studies or other economic studies, except in prescribed cases, such as in a preliminary economic assessment (or New PEA) under certain circumstances. The SEC normally only permits issuers to report mineralization that does not constitute “Reserves” as in-place tonnage and grade without reference to unit measures. Under U.S. standards, mineralization may not be classified as a “Reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the Reserve determination is made. U.S. investors are cautioned not to assume that any part or all of a “Inferred”, “Measured” or “Indicated” Mineral Resource exists or is economically or legally mineable. Information concerning descriptions of mineralization and Mineral Resources contained herein may not be comparable to information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.
The Rubicon Minerals Advantage

STRONG OPERATING TEAM: Management team with a proven history of operating and turning around underground operations in Canada

2nd LARGEST LAND PACKAGE in RED LAKE: More than 28,000 hectares, second largest exploration land package (~40%) in the prestigious Red Lake Gold Mining Camp

NEW MINE INFRASTRUCTURE: Mill operated at 1,540 tpd and 95.1% recoveries in 2018 during the bulk sample program

VALIDATED MINERAL RESOURCE ESTIMATE9: Positive reconciliation from 35kt bulk sampling program and substantial growth in Measured and Indicated ounces

ROBUST NEW PEA

(9) Refer to endnote #9 for further details
Capital Structure and Shareholder Info

Strong balance sheet and institutional support

Balance Sheet and Capital Structure

- Cash balance (unaudited): ~C$8.5 M
- Sprott Lending LT debt (Term Dec 31/20): C$12.0 M
- Lease liabilities: C$1.4 M
- Shares outstanding: 77,285,613
- Options/Warrants outstanding***: 6,579,473

Market Data (September 5, 2019)**

- RMX share price: C$1.11
- Market capitalization: C$85.8 M
- Avg. 30-day daily trading volume (TSX & OTC markets): 163,729

Equity ownership breakdown*

- Institutional Investors 74.31%
- Royal Gold 5.13%
- Credit 12.94%
- Retail 7.00%
- George Ogilvie 0.62%

Institutional shareholders include:

- Franklin Templeton
- Sentry
- Donald Smith & Co.
- Greywolf
- Mackenzie Financial
- Sun Valley Gold
- Royal Gold
- US Global
- Sprott (Ninepoints)
- RBIM
- SSI Asset Management

Target price range: C$2.00-3.50

*Numbers may not add due to rounding
**Source: TSX and OTC markets, as of September 5, 2019
***Includes Sprott Lending warrants

Analyst Coverage

- BMO Andrew Mikitchook
- TD Securities Daniel Earle
- Laurentian Bank Ryan Hanley
- Mackie Research Stuart McDougall
- Industrial Alliance George Topping
- Canaccord Genuity Tom Gallo
- Cormark Tyron Breytenbach

TSX : RMX | OTCQX : RBYCF
Phoenix Gold Project: Infrastructure and Tax Pools

> C$770 million spent on infrastructure and development

- Head frame and hoist commissioned
- 13 km of U/G development;
- Shaft completed to 730 m below surface
- 200-person camp
- Tailings management facility completed
- Power, roads, earth and civil works in place

• 1,250 tpd mill (permitted)
• 95.1% recoveries during 2018
• Substantially permitted

<table>
<thead>
<tr>
<th>Capital spent/ Tax pools (C$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill construction</td>
</tr>
<tr>
<td>Surface construction</td>
</tr>
<tr>
<td>U/G exploration, development, sampling, etc.</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Tax loss pools</td>
</tr>
</tbody>
</table>

(April 2019)

- $392M – Phoenix Gold Project
- $308M – can be used externally
Milestones Achieved to Improve Confidence in The Phoenix Gold Project

✓ REPUTABLE CONSULTANTS: Golder Associates and T. Maunula & Associates have been working with Rubicon since early 2017.

✓ NEW STRUCTURAL MODEL\(^7\) SHOWS BETTER CONTINUITY: Simplified interpretation allows for the evaluation of bulk mining methods

✓ 2018 MINERAL RESOURCE ESTIMATE\(^7\) DEMONSTRATED SIGNIFICANT GROWTH: M&I Resources increased +113%; Inferred Resources increased +81%

✓ POSITIVE 35K-TONNE BULK SAMPLE RECONCILIATION\(^4\): Validating 2018 Mineral Resource Estimate and new geological model

✓ +110% INCREASE IN 2019 MEASURED & INDICATED RESOURCES\(^2\): 2019 Mineral Resource Estimate demonstrated substantial growth in ounces in higher confidence categories

✓ NEW PEA\(^1\): AFTER-TAX IRR and NPV5% 40.2% and C$135M RESPECTIVELY: Based on US$1,325/oz LT gold price assumption

UPDATED MINERAL RESOURCE ESTIMATE

FEASIBILITY STUDY AND SECURING CONSTRUCTION FUNDING

(1) Refer to endnote #1 for further details
(4) Refer to endnote #4 for further details
(7) Refer to endnote #7 for further details
# New PEA¹: Robust Economic Potential

**Base case estimates**

<table>
<thead>
<tr>
<th><strong>Economics (Base Case):</strong></th>
<th><strong>New PEA Conceptual Project Life of Mine (“LOM”)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>After-tax IRR (“IRR”)(%)</td>
<td>40.2%</td>
</tr>
<tr>
<td>After-tax NPV₅% (“NPV”)(C$)</td>
<td>C$135.2M</td>
</tr>
<tr>
<td>Estimated free cash flow (“FCF”) generated</td>
<td>C$191.5M</td>
</tr>
<tr>
<td>Exchange rate (C$/US$)</td>
<td>0.7519</td>
</tr>
<tr>
<td>LT gold price assumption (US$)</td>
<td>US$1,325/oz</td>
</tr>
<tr>
<td>LT gold price assumption (C$)</td>
<td>C$1,762/oz</td>
</tr>
<tr>
<td>Payback period</td>
<td>3.9 years</td>
</tr>
</tbody>
</table>

- Strong estimated returns over a relatively short time frame (6.2 year estimated mine life)
- Significant value considering current RMX market capitalization of C$85.8 million
- Upside potential with spot gold @ US$1,513/oz⁵
- The majority of Project cost estimates in Canadian dollars

¹ Refer to endnote #1 for further details
(5) Refer to endnote #5 for further details
## Initial Capital Costs Estimates

### Pre-Commercial Production

<table>
<thead>
<tr>
<th>Initial Capital cost estimates</th>
<th>Pre-CP (C$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground development &amp; infrastructure</td>
<td>$43.2</td>
</tr>
<tr>
<td>Equipment</td>
<td>$16.9</td>
</tr>
<tr>
<td>Surface and mill</td>
<td>$22.8</td>
</tr>
<tr>
<td>Contingency (15%)</td>
<td>$18.3</td>
</tr>
<tr>
<td><strong>Total Initial Capital</strong></td>
<td><strong>$101.2</strong></td>
</tr>
<tr>
<td>Capitalized operating costs</td>
<td>$45.7</td>
</tr>
<tr>
<td>Proceeds from gold sales</td>
<td>$74.5</td>
</tr>
<tr>
<td><strong>Net positive cash flow</strong></td>
<td><strong>$28.8</strong></td>
</tr>
<tr>
<td><strong>Net Pre-CP Capital</strong></td>
<td><strong>$72.4</strong></td>
</tr>
<tr>
<td><strong>Projected Funding Requirement</strong> (incl. 15% contingency)</td>
<td><strong>$80.9</strong></td>
</tr>
</tbody>
</table>

Derived from actual numbers. Higher-end of U/G peer group for added rigor.

- ~44koz of potential production during Pre-CP
- Potential initial production commences 8 months from start of Pre-CP
- Pre-CP average daily mill throughput ~629 tpd

At spot ~US$1,513/oz (or C$2,008/oz) gold, Projected Funding Requirement could potentially be lowered by C$8-10 million.

(5) Refer to endnote #5 for further details.
U/G Development Plan

26.6km of Conceptual LOM development

Pre-CP Development ~6,000 m:
- Ramp to surface allows for effective movement of equipment and personnel will accommodate larger haulage trucks
- 12-months of development ahead of conceptual mining

Ramp development below 610-m Level:
- Peak development rates of 5 rounds (14 m) per day
- Material will be trucked up to the 610-m Haulage Level for skipping
- C$5.5k-6.5k costs per metre at higher-end of range compared to peers derived from actual costs between 2013-2018

14km of existing development
- Very good, dry conditions
- 730-m Shaft and Hoist
- 3,000 tpd capacity on a 12-hour shift
- Predominantly use of moving material in LOM plan

LOM payable Ounces Per Development Metre
Canadian U/G developer peers

<table>
<thead>
<tr>
<th>Canadian Peer U/G developer</th>
<th>Total LOM development lateral, ramp, vertical (km)</th>
<th>LOM payable gold production (000s)</th>
<th>LOM payable ounces/development metre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Gold (2019 FS)</td>
<td>127.6</td>
<td>970</td>
<td>7.6</td>
</tr>
<tr>
<td>Harte Gold (2019 FS)</td>
<td>82.8</td>
<td>849</td>
<td>10.3</td>
</tr>
<tr>
<td>Monarch Gold (2018 FS)</td>
<td>143.8</td>
<td>1,557</td>
<td>10.8</td>
</tr>
<tr>
<td>Osisko Mining (2018 PEA)</td>
<td>125.1</td>
<td>1,769</td>
<td>14.1</td>
</tr>
<tr>
<td>Rubicon (2019 PEA)</td>
<td>26.6</td>
<td>494</td>
<td>18.6</td>
</tr>
</tbody>
</table>

Source: Company reports, Rubicon estimates
# Mining Methods Contemplated

## Project predominantly bulk mining

Successfully executed during 2018 test trial mining program\(^4\)

<table>
<thead>
<tr>
<th>Metrics (base case estimates)</th>
<th>Sub-Level Longhole</th>
<th>Uppers</th>
<th>Mass Blast Raise Mining (&quot;MBRM&quot;)</th>
<th>Cut-and-Fill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual LOM tonnes</td>
<td>1,595,921</td>
<td>708,880</td>
<td>513,974</td>
<td>226,420</td>
</tr>
<tr>
<td>Conceptual LOM tonnes (%)</td>
<td>52.4%</td>
<td>23.3%</td>
<td>16.9%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Total stopes</td>
<td>66</td>
<td>172</td>
<td>43</td>
<td>60</td>
</tr>
<tr>
<td>Average stope size (tonnes)</td>
<td>24,181</td>
<td>4,121</td>
<td>11,953</td>
<td>3,774</td>
</tr>
<tr>
<td>Average dimensions</td>
<td>36m x 8m x 25m</td>
<td>16m x 6m x 12m</td>
<td>37m x 3m x 22m</td>
<td>12m x 6m x 16m</td>
</tr>
<tr>
<td>Unplanned external dilution</td>
<td>10%</td>
<td>15%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Average diluted grade</td>
<td>5.34 g/t Au</td>
<td>5.30 g/t Au</td>
<td>5.31 g/t Au</td>
<td>5.16 g/t Au</td>
</tr>
<tr>
<td>Mining cost per tonne (C$)</td>
<td>$82.88</td>
<td>$86.88</td>
<td>$92.15</td>
<td>$120.58</td>
</tr>
<tr>
<td>Typical productivity rates (tpd)</td>
<td>400</td>
<td>300</td>
<td>600</td>
<td>130</td>
</tr>
</tbody>
</table>

- Forgoing sub-level development improves stope cycle time and overall costs
- Can be utilized for stopes as narrow at 1.0 m
- Management visited the Hemlo Camp
- Company evaluating expanding its use, could add more ounces to the mineable resources

(4) Refer to endnote #4 for further details
**Sub-Level Longhole and Uppers**

Core to the conceptual LOM plan

- **“Sub-Level Longhole”**
  - 28m down-holes
  - 18m up-holes
  - sub-levels 20-30m apart

- **“Uppers”** 18m up-holes

- **Section Ring 33**

- **Section view looking north (mine grid)**

- **Longitudinal view looking east (mine grid)**

- **Cross cut**
MBRM

Potential to apply to narrower stopes

Driving the raise

Cable bolting

Longhole drilling:
Holes ~10 m in length

Charging and blasting longholes

Top sill

Backfilled stope

30-60 m avg. stope heights

1-3 m avg. stope widths

Image Source: ManRoc Developments Inc.
New PEA: Conceptual LOM Plan

Projected production, grade, throughput, costs

- Potential initial production is anticipated in the 8th month of Pre-CP (in Year -2)
- Steady ramp up to 1,250 tpd in Year 1
- Step-towards 1,800 tpd by years 3-4
- Increased throughput rate drive down estimated costs
- Application for permit amendments to 1,800 tpd during Pre-CP
- AISC in Year 6 includes closure cost estimates

Year -2 (stub year) includes on 8 months of construction and development
Year 6 (stub year) includes only 1 month of operation

(1) Refer to endnote #1 for further details
(2) Refer to endnote #2 for further details
(3) Refer to endnote #3 for further details
Operating and Sustaining Cost Estimates
Derived from actual operating results between 2013-2018

**Capital costs:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Sustaining (C$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground development</td>
<td>$86.7</td>
</tr>
<tr>
<td>and infrastructure</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>$53.1</td>
</tr>
<tr>
<td>Surface and mill</td>
<td>$6.5</td>
</tr>
<tr>
<td>Closure costs</td>
<td>$7.7</td>
</tr>
<tr>
<td><strong>Total Sustaining Capital</strong></td>
<td><strong>$154.0</strong></td>
</tr>
<tr>
<td><strong>Per CP year (5.1 years)</strong></td>
<td><strong>$30/year</strong></td>
</tr>
</tbody>
</table>

Driven by realistic U/G development costs at the higher-end of peer group range

**Operating Costs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total (C$ millions)</th>
<th>Per tonne (C$)</th>
<th>Per ounce (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$268.4</td>
<td>$88.14/LOM tonne</td>
<td>US$409/LOM oz</td>
</tr>
<tr>
<td>Processing</td>
<td>$99.6</td>
<td>$32.70/LOM tonne</td>
<td>US$152/LOM oz</td>
</tr>
<tr>
<td>Site G&amp;A</td>
<td>$23.8</td>
<td>$7.82/LOM tonne</td>
<td>US$36/LOM oz</td>
</tr>
<tr>
<td><strong>Total LOM operating costs</strong></td>
<td><strong>$391.8</strong></td>
<td><strong>$128.67/LOM tonne</strong></td>
<td><strong>US$597/LOM oz</strong></td>
</tr>
<tr>
<td><strong>Total commercial operating costs</strong></td>
<td><strong>$346.1</strong></td>
<td><strong>$123.63/CP tonne</strong></td>
<td><strong>US$579/CP oz</strong></td>
</tr>
<tr>
<td>Royalties (3%) &amp; other prod. taxes</td>
<td>$26.9</td>
<td>$9.61/CP tonne</td>
<td>US$45/CP oz</td>
</tr>
<tr>
<td><strong>Total Cash Costs</strong></td>
<td><strong>$373.0</strong></td>
<td><strong>$133.23/CP tonne</strong></td>
<td><strong>US$624/CP oz</strong></td>
</tr>
<tr>
<td>AISC</td>
<td>$527.1</td>
<td>$188.25/CP tonne</td>
<td>US$882/CP oz</td>
</tr>
<tr>
<td>AIC</td>
<td>$677.0</td>
<td>$222.30/LOM tonne</td>
<td>US$1,031/LOM oz</td>
</tr>
</tbody>
</table>

- Operating costs derived from actual results between 2013 to 2018, including the 2018 test trial mining and bulk sample processing program
- Majority of the estimated costs:
  - Labour (50-60%)
  - CAD denominated costs (~80%)
## Robust Economic Potential

### Sensitivities

**After-Tax IRR (%) / NPV (C$ millions) – Sensitivities to gold price and US$/C$ exchange ratio**

<table>
<thead>
<tr>
<th>US$/C$ Exchange ratio</th>
<th>Gold Price (US$/oz)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$1,100</td>
<td>$1,200</td>
<td>$1,325 (base case)</td>
<td>$1,400</td>
<td>$1,500</td>
<td></td>
</tr>
<tr>
<td>0.83</td>
<td>(4.4%)/($30.1)</td>
<td>9.3% / $14.9</td>
<td>24.4% / $71.1</td>
<td>32.8% / $104.8</td>
<td>43.5% / $149.7</td>
<td></td>
</tr>
<tr>
<td>0.81</td>
<td>(0.4%) /($17.8)</td>
<td>13.1% / $28.4</td>
<td>28.2% / $86.0</td>
<td>36.6% / $120.5</td>
<td>47.4% / $166.5</td>
<td></td>
</tr>
<tr>
<td>0.79</td>
<td>4.6% / ($1.3)</td>
<td>18.0% / $46.4</td>
<td>33.1% / $105.8</td>
<td>41.6% / $141.5</td>
<td>52.6% / $189.0</td>
<td></td>
</tr>
<tr>
<td>0.77</td>
<td>8.2% / $11.1</td>
<td>21.5% / $59.9</td>
<td>36.6% / $120.7</td>
<td>45.3% / $157.2</td>
<td>57.4% / $205.8</td>
<td></td>
</tr>
<tr>
<td>0.7519 (base case)</td>
<td>11.7% / $23.5</td>
<td>25.0% / $73.4</td>
<td><strong>40.2% / $135.2</strong></td>
<td>48.9% / $172.9</td>
<td><strong>60.2% / $222.6</strong></td>
<td></td>
</tr>
<tr>
<td>0.73</td>
<td>16.3% / $40.0</td>
<td>29.5% / $91.3</td>
<td>44.8% / $155.4</td>
<td>53.7% / $193.8</td>
<td>65.2% / $245.1</td>
<td></td>
</tr>
<tr>
<td>0.71</td>
<td>20.6% / $56.5</td>
<td>33.9% / $109.3</td>
<td>49.4% / $175.2</td>
<td>58.4% / $214.8</td>
<td>70.1% / $267.5</td>
<td></td>
</tr>
</tbody>
</table>

Valuation does not include other assets, including Rubicon’s 28,000 hectare Red Lake exploration land package and approximately C$521M of projected unused tax loss pools at the end of conceptual LOM.

Economics enhanced at current US$1,513/oz Spot Gold Price\(^5\)/FX levels

---

(5) Refer to endnote #5 for further details
Successful 2018 Test Trial Mining and Bulk Sample Processing Program

2018 Bulk Sample Reconciliation Results
(before external mining dilution)

<table>
<thead>
<tr>
<th>Bulk sample results</th>
<th>Block model[^2,^3]</th>
<th>Difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonnes (t)</td>
<td>32,551</td>
<td>+7.2%</td>
</tr>
<tr>
<td>Grade (g/t Au)</td>
<td>4.93</td>
<td>+6.1%</td>
</tr>
<tr>
<td>Ounces (oz)</td>
<td>5,165</td>
<td>+13.8%</td>
</tr>
<tr>
<td>External dilution</td>
<td>8.7%</td>
<td>-13.0%</td>
</tr>
</tbody>
</table>

[^2]: Refer to endnote #2 for further details
[^3]: Refer to endnote #3 for further details

- >10,000 samples taken from chips and mucks
- Drilling at 5-metre centres for stope shaped design and grade confirmation
- 3 Test stopes mined sequentially to avoid comingling of material; Stockpiled separately and batched sequentially to the mill separately
- Sublevel longhole and uppers methods: Successfully demonstrated the amenability of bulk mining methods
- External dilution was minimized due to near-vertical orientation of the stopes and mining within High-Ti Basalts (and not to the contacts)

Stope Information and Mill Results

<table>
<thead>
<tr>
<th>Categories</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average stope height (m)</td>
<td>21 m</td>
</tr>
<tr>
<td>Average stope strike length (m)</td>
<td>27 m</td>
</tr>
<tr>
<td>Average stope width (m)</td>
<td>6 m</td>
</tr>
<tr>
<td>External mining dilution (%)</td>
<td>8.7%</td>
</tr>
<tr>
<td>Achieved throughput</td>
<td>70 tph</td>
</tr>
<tr>
<td>Mill recovery (%)</td>
<td>95.1%</td>
</tr>
<tr>
<td>Recovery from gravity circuit (%)</td>
<td>43.2%</td>
</tr>
<tr>
<td>Approximate silver (Ag) ounces recovered</td>
<td>1,043 oz Ag</td>
</tr>
</tbody>
</table>

Potential to operate at 1,800 tpd at current configuration with minor modifications

Potentially translates to lower processing costs in future mining

(4) Refer to endnote #4 for further details
Conceptual Asset Values Mitigate Downside Risk

Assets carry conceptual values comparable to the Company’s market cap

New PEA Economic estimates\(^1,2,3\):  
After-tax IRR 40.2%  
After-tax NPV C$135.2M

Red Lake Properties (28,266 ha):  
Based on precedent land transactions in Red Lake, Rubicon’s Red Lake Properties could have a conceptual value of between C$30-50 M

C$521M Estimated tax loss pools remaining (after conceptual LOM):  
Potential value of C$5-10 M  
Current cash balance:  
~C$8.5 M

Phoenix Gold Project  
C$135.2M

Red Lake Properties  
~C$30-50M

Financial assets  
~C$13-20M

Sprott Lending LT Debt:  
C$12 M with 5% coupon (payment-in-kind)

Long-term debt  
(~C$15M)

Rubicon current market cap:  
C$85.8 M*  
*As of September 5, 2019

(1) Refer to endnote #1 for further details  
(2) Refer to endnote #2 for further details  
(3) Refer to endnote #3 for further details
Robust 2019 Mineral Resource Estimate
Increased M&I Resources, improved confidence in the Deposit

- 2018 bulk sample results validates and supports the current geological model and parameters used in the 2019 Mineral Resource Estimate
- “Explore Target” contain 0.9 to 1.2 million tonnes of mineralized material grading between 5.0 to 7.0 g/t Au; Potential to convert to Inferred Mineral Resources
- Robust conversion of Inferred to Measured and Indicated Mineral Resources

2019 Mineral Resource Estimate – April 23, 2019
@ 3.0 g/t Au Cut-off

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Quantity (000’tonnes)</th>
<th>Grade (g/t Au)</th>
<th>Contained Gold Ounces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured (M)</td>
<td>442</td>
<td>6.99</td>
<td>99,000</td>
</tr>
<tr>
<td>Indicated (I)</td>
<td>2,485</td>
<td>6.13</td>
<td>490,000</td>
</tr>
<tr>
<td>M + I</td>
<td>2,927</td>
<td>6.26</td>
<td>589,000</td>
</tr>
<tr>
<td>Inferred</td>
<td>2,570</td>
<td>6.53</td>
<td>540,000</td>
</tr>
</tbody>
</table>

Explore Target**
900-1,200 5.0-7.0

- Effective date for this Mineral Resource is April 23, 2019
- Mineral Resource Estimate uses a break-even economic cut-off grade of 3.0 g/t Au based on assumptions of a gold price of US$1,400 per ounce, an exchange rate of US$/C$ 0.77, mining cash costs of C$97/t, processing costs of C$24/t, G&A of C$6/t, sustaining capital C$20/t, refining, transport and royalty costs of C$57/oz, and average gold recoverability of 95%
- Mineral Resources are not Mineral Reserves and do not demonstrate economic viability
- There is no certainty that all or any part of this Mineral Resource will be converted into Mineral Reserve
- All figures are rounded to reflect the relative accuracy of the estimates and totals may not add correctly
- **The potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource.

(2) Refer to endnote #2 for further details
(3) Refer to endnote #3 for further details
(6) Refer to endnote #6 for further details
2019 Mineral Resource Estimate\textsuperscript{2,3}

Clear path to potential mineral resource growth and upgrade

2019 Mineral Resource Block Model - Zone 2
Longitudinal View Looking East (Mine-Grid)

2019 Exploration Program:
Up to 20,000 m of step-out drilling to potentially expand overall Mineral Resource estimates

Resource Classification
- Measured
- Indicated
- Inferred
- Exploration Targets

2019 Drill hole intercept grades
- 10+ g/t Au
- 7-10 g/t Au
- 5-7 g/t Au
- 3-5 g/t Au
- 1-3 g/t Au

Explore Targets\textsuperscript{6}:
0.9-1.2 million tonnes of sparsely drilled mineralized material grading between 5.0-7.0 g/t Au

(2) Refer to endnote #2 for further details
(3) Refer to endnote #3 for further details
(6) Refer to endnote #6 for further details

Remains open at depth and along strike
## Strategy for 2019 and 2020

<table>
<thead>
<tr>
<th>Milestones</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H1</td>
<td>H2</td>
</tr>
<tr>
<td>2019 Mineral Resource Estimate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infill/step-out drilling</td>
<td>![Green]</td>
<td>![Blue]</td>
</tr>
<tr>
<td>New PEA</td>
<td>![Green]</td>
<td>![Blue]</td>
</tr>
<tr>
<td>Updated Mineral Resource Estimate</td>
<td>![Green]</td>
<td>![Blue]</td>
</tr>
<tr>
<td>Additional feasibility work</td>
<td>![Green]</td>
<td>![Blue]</td>
</tr>
</tbody>
</table>

*2019 infill drilling data to be included*
Prolific Red Lake Gold Camp:
30 million ounces produced and prime for consolidation
Rubicon Red Lake Properties

Highly-prospective targets adjacent to Newmont Goldcorp

- Several highly-prospective grassroots exploration targets
- Potential exploration work will commence if the Phoenix Gold Project's advancement is on the right path
- Targets were evaluated and prioritized by an exploration consultant with +20 years of experience in Red Lake

1# McCuaig
- Intriguing copper-porphyry-style mineralization
- Historical drilling:
  - MC-07-01AW: 15.65 g/t Au over 1.55 m
  - MC-02-32: 22.83 g/t Au, 3.10 m (incl. 75.91 g/t Au, 0.70 m)
  - MC-02-27: 25.48 g/t Au, 1.1 m & 18.08 g/t Au, 0.45 m

2# East Bay
- High-grade GAZ Zone deposit dips into property
- GAZ Zone deposit (Newmont Goldcorp, 2005):
  - Inferred: 1.4 Mt, 360 Koz, grading 8.0 g/t Au

3# Sidace
- Adjacent to MDZ/UDZ deposits

10 km radius from the Phoenix Gold Project

(12) Refer to endnote #12 for further details.
Close Proximity Targets\textsuperscript{8,9,11}

Potential LOM incremental feed of the Phoenix Gold Project

- 5-6 close proximity targets within \textbf{2 km} of the Phoenix Gold Project
- All are potentially accessible from underground
- In-house modelling of the mineralized zones and generate conceptual tonnes and grade for the zones; rank each zone as to potential to fit in pipeline
- Build “Rubicon Red Lake” model to look at bigger picture (structural and lithological model)
- \textbf{Evaluating the Mineral Resource potential of Historic McFinley, Peninsula, CARZ, and Island Zones}

(10) Please refer to end note \#10 for further details
(11) Please refer to end note \#11 for further details
(13) Please refer to end note \#13 for further details
Close Proximity Targets – McFinley Deep\textsuperscript{11}
Potential LOM incremental feed of the Phoenix Gold Project

- Drilling intersected gold-bearing quartz veins and sulphides, and banded iron formation (BIF) through four zones, similar to the lithological sequence in the historic McFinley Deposit
- Drill hole ended in HiTi basalts, suggesting that mineralization remains open to the west (mine grid)

Historic McFinley Deposit (2002)\textsuperscript{10}
Inferred: 66,801 oz Au
(303,000 tonnes grading 6.86 g/t Au)

More than 550 m deep from the bottom of the historic McFinley Deposit mineral resource

(10) Refer to endnote #10 for further details.
(11) Refer to endnote #11 for further details

685-17-C04:
3.66 g/t Au over 0.4 m
2.93 g/t Au over 0.7 m
3.48 g/t Au over 1.0 m
5.55 g/t Au over 0.7 m

(10) Refer to endnote #10 for further details.
Not compiled according to NI
(11) Refer to endnote #11 for further details

TSX : RMX | OTCQX : RBYCF

Scale: 200 m
Close Proximity Targets\textsuperscript{8,9}

Northern Peninsula, CARZ & Island Zone

- Historical high-grade intercepts along strike and adjacent to the F2 Gold Deposit warrant follow up drilling
- Compiling dataset and evaluating Mineral Resource potential for eventual drill program

Select historical high-grade intercepts:

**Island Zone\textsuperscript{8}** \textit{(not true widths)}
- PZ-23: 70.1 g/t Au over 3.1 m
- PZ-12: 28.7 g/t Au over 1.4 m
- PZ-47: 9.0 g/t Au over 4.5 m (incl. 22.2 g/t Au over 1.7 m)
- PZ-25: 8.4 g/t Au over 8.0 m (incl. 15.8 g/t Au over 3.5 m)
- PZ-03: 15.5 g/t Au over 4.8 m (incl. 33.3 g/t Au over 1.9 m)
- PZ-02: 15.0 g/t Au over 2.8 m

**Carbonate Zone\textsuperscript{9} (“CARZ”)** \textit{(not true widths)}
- PR-15-11: 24.17 g/t Au over 2.00 m
- PR-15-11: 4.88 g/t Au over 10.50 m (incl. 6.43 g/t Au over 7.00 m)
- PR-15-16: 8.48 g/t Au over 3.25 m (incl. 11.10 g/t Au over 2.25 m)
- PR-15-19: 8.43 g/t Au over 1.05 m
- PR-15-19: 2.30 g/t Au over 12.00 m (incl. 5.76 g/t Au over 2.00 m)
- PR-15-06: 10.77 g/t Au over 2.65 m
- PR-15-09: 7.84 g/t Au over 1.50 m

(8) Refer to endnote #8 for further details
(9) Refer to endnote #9 for further details
Key Takeaways to the Rubicon Story

• ROBUST NEW PEA – AFTER-TAX IRR & NPV ESTIMATE OF 40.2% and C$135M, RESPECTIVELY

• SIGNIFICANT NEW & OPERATIONAL INFRASTRUCTURE

• VALIDATED AND GROWING MINERAL RESOURCE ESTIMATE

• 2nd LARGEST AND STRATEGIC LAND PACKAGE IN PROLIFIC RED LAKE GOLD CAMP IN CANADA
Appendices
The Rubicon Vision
Approach to generate long-term shareholder value

ADVANCE THE PHOENIX GOLD PROJECT TO COMMERCIAL PRODUCTION: Continue to grow M&I Resources; Deliver robust PEA and FS; Secure Funding; Execute on construction and Ramp-up

DEMONSTRATE ORGANIC GROWTH IN RED LAKE: Evaluate and explore McFinley, Close Proximity Targets, and Regional Red Lake Properties

EVALUATE & EXECUTE ON BIG PICTURE OPPORTUNITIES TO DELIVER SHAREHOLDER VALUE
# Leadership With Turnaround Experience

**Expertise in underground mining, geology, finance and law**

## Management

**George Ogilvie, P.Eng.**  
President and CEO  
- +29 years of management, operating, technical, M&A, and restructuring  
- Former CEO of Kirkland Lake Gold; **led the successful turnaround of the Macassa Mine** and acquisition of St. Andrew Goldfields  
- Experience in deep, underground narrow-vein gold deposits in South Africa with **AngloGold**  
- Grew Rambler Metals from grassroots **exploration to profitable junior producer**

**Mike Willett, P.Eng.**  
Director of Projects  
- +37 years of management, operating and technical experience  
- Held senior roles with **Hudbay**  
- Led the **increase in mineral resources and permitting** as CEO of Tamerlane Ventures Inc.

**Nick Nikolakakis, MBA**  
CFO  
- +22 years of corporate finance and management experience; **+$2 billion financings**  
- Former CFO Rainy River; led the **sale to New Gold**  
- Former VP Finance Barrick – led the **C$1.5 Billion financing of Pueblo Viejo** in Dominican Republic

## Board

**Julian Kemp, BBA, CPA, CA, C.Dir (Chair)**  
- Led Rubicon through a successful strategic review and CCAA process  
- Former CFO Fortune Minerals

**Peter R. Jones, P.Eng.**  
- Led the successful **IPO of Hudbay Minerals Inc. and its turnaround**  
- Former Chair and CEO of Adanac Molybdenum, Chair of Medusa Mining

**Dr. David A.S. Palmer, PhD, P.Geo.**  
- Experienced geologist  
- **Borden Deposit discovery** as President and CEO of Probe Mines; **sold to Goldcorp**  
- Current President and CEO of Probe Metals

**Daniel Burns, JD, MBA, CPA, CMA, ICD.D, ACC**  
- President and CEO of NDC Solutions Inc.  
- Current Chair of World Council of Credit Unions

**Sasha Bukacheva, CFA, MSc.**  
- Previously a top-ranked base metals Equity Research Analyst for BMO  
- Former Vice President, Finance and Administration for Stans Energy Corp.
Conceptual Stopes
700 stopes designed and evaluated

- **341** stopes included in the conceptual LOM plan
- An additional **359 conceptual stopes** were designed but not included in the conceptual LOM mainly due to falling below the 3.5 g/t Au cut-off grade
- Opportunity to add some of these excluded stopes into the conceptual LOM plan with further drilling, engineering, and a higher gold price assumption
Conceptual LOM Financial Model¹,²,³

Pre-CP = Years -2,-1; CP = Years 1-6

### Conceptual LOM Summary

<table>
<thead>
<tr>
<th>Unit</th>
<th>YEAR</th>
<th>-2</th>
<th>-1</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold Price</td>
<td>US$/oz</td>
<td>1,325</td>
<td>1,325</td>
<td>1,325</td>
<td>1,325</td>
<td>1,325</td>
<td>1,325</td>
<td>1,325</td>
<td>0.7519</td>
<td>-</td>
</tr>
<tr>
<td>CAD/USD</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>0.7519</td>
<td>-</td>
</tr>
</tbody>
</table>

### Mill Feed

| Throughput | Tpd | 1,370 | 133 | 670 | 1,225 | 1,516 | 1,691 | 1,699 | 1,577 | 823 |
| Mineralized Tonnage | Tonnes | 3,045,196 | 4,000 | 241,333 | 440,942 | 545,907 | 608,731 | 611,763 | 567,823 | 24,697 |
| Diluted Grade | g/t | 5.31 | 4.06 | 5.91 | 5.67 | 4.91 | 4.71 | 5.17 | 5.87 | 7.38 |
| Mill Recovery | % | 95.0% | 95% | 95% | 95% | 95% | 95% | 95% | 95% | 0% |

### Conceptual Payable Gold

| Gravity | oz | 223,411 | 224 | 19,713 | 34,568 | 37,025 | 39,587 | 43,683 | 46,093 | 2,518 |
| CIL | oz | 270,172 | 271 | 23,839 | 41,803 | 44,775 | 47,873 | 52,826 | 55,740 | 3,045 |
| Total Conceptual Payable Gold | oz | 493,583 | 496 | 43,551 | 76,371 | 81,800 | 87,460 | 96,510 | 101,833 | 5,563 |

### Estimated Post-Tax Cash Flow

| Net Revenue | C$ 000 | 868,442 | 872 | 76,627 | 134,371 | 143,923 | 153,882 | 169,806 | 179,172 | 9,788 |
| Royalties and other production taxes | C$ 000 | (29,907) | (78) | (2,924) | (4,656) | (4,943) | (5,241) | (5,719) | (6,000) | (346) |
| Net Revenue Less Royalty | C$ 000 | 838,534 | 794 | 73,703 | 129,715 | 138,981 | 148,641 | 164,087 | 173,171 | 9,442 |
| Mining costs | C$ 000 | (268,404) | (4,075) | (25,388) | (41,326) | (45,975) | (49,313) | (49,903) | (49,773) | (2,651) |
| Milling costs | C$ 000 | (99,584) | (411) | (11,264) | (15,390) | (17,479) | (18,505) | (18,161) | (17,398) | (976) |
| Site G&A | C$ 000 | (23,824) | (1,642) | (2,898) | (3,476) | (3,779) | (3,961) | (3,970) | (3,843) | (255) |
| Total Operating Cost | C$ 000 | (391,812) | (6,128) | (39,550) | (60,193) | (67,233) | (71,778) | (72,033) | (71,014) | (3,882) |

### Operating Cash Flow

| Mine Development & U/G Infrastructure | C$ 000 | 446,723 | (5,334) | 34,153 | 69,523 | 71,747 | 76,863 | 92,053 | 102,158 | 5,561 |
| Equipment | C$ 000 | (129,956) | (14,227) | (28,993) | (21,590) | (22,177) | (21,776) | (15,533) | (5,660) | - |
| Surface & Mill Infrastructure | C$ 000 | (69,917) | (6,710) | (10,140) | (11,241) | (10,227) | (11,569) | (10,118) | (8,930) | (982) |
| Income tax | C$ 000 | (29,309) | (20,639) | (2,145) | (2,525) | (1,500) | (2,500) | - | - |
| Contingency (15%) | C$ 000 | (18,351) | (7,036) | (11,315) | - | - | - | - | - |

### Estimated Cash Flow Before Financing Activity

| Change in Working Capital | C$ 000 | 191,489 | (53,946) | (18,441) | 34,167 | 37,843 | 41,017 | 66,402 | 87,567 | (2,671) |
| Post Tax Cash Flow | C$ 000 | 191,489 | (54,639) | (16,306) | 36,399 | 37,759 | 41,279 | 67,697 | 88,475 | (8,395) |
| Post Tax NPV Unlevered Cash Flows | 5% | $135,233 | - | - | - | - | - | - | - | - |
| Post Tax IRR | 40.2% | - | - | - | - | - | - | - | - | - |

### Unit Cost Metrics - Pre-CP excluded from calculation

| Operating Cost (LOM) | C$/tonne | $128.67 | - | - | 137 | 123 | 118 | 118 | 125 | 157 |
| Operating Cash Cost (C1, CP) | US$/ounce | $623.93 | - | - | 638 | 663 | 662 | 606 | 569 | 571 |
| AISC* | US$/ounce | $881.55 | - | - | 987 | 975 | 970 | 806 | 676 | 1,684 |
| AIC* | US$/ounce | $1,031.21 | - | - | 1,183 | 1,158 | 1,141 | 961 | 823 | 4,375 |

(1) Refer to endnote #1 for further details
(2) Refer to endnote #2 for further details
(3) Refer to endnote #3 for further details
## Robust Economic Potential

### Sensitivities on mill throughput, grade, Capex/Opex

#### After-tax IRR(%)/NPV5%(C$)

### Conceptual LOM diluted head grade (g/t Au)

<table>
<thead>
<tr>
<th>LOM Avg. Throughput (tpd)</th>
<th>4.50</th>
<th>4.75</th>
<th>5.00</th>
<th>5.31 (base case)</th>
<th>5.50</th>
<th>5.75</th>
<th>6.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.50%</td>
<td>2.8%</td>
<td>10.9%</td>
<td>20.0%/$54.0</td>
<td>25.3%</td>
<td>32.0%</td>
<td>38.6%</td>
</tr>
<tr>
<td>1,200</td>
<td>($34.6)</td>
<td>($7.4)</td>
<td>($20.4)</td>
<td>($54.0)</td>
<td>($74.7)</td>
<td>($101.3)</td>
<td>($128.8)</td>
</tr>
<tr>
<td>1,300</td>
<td>6.9%</td>
<td>15.2%</td>
<td>23.0%</td>
<td>32.3%/$102.4</td>
<td>37.6%</td>
<td>44.4%</td>
<td>51.2%</td>
</tr>
<tr>
<td>1,370 (bc)</td>
<td>14.9%</td>
<td>23.0%</td>
<td>30.9%</td>
<td>40.2%/$135.2</td>
<td>45.7%</td>
<td>53.0%</td>
<td>59.9%</td>
</tr>
<tr>
<td>1,500</td>
<td>28.7%</td>
<td>37.0%</td>
<td>45.1%</td>
<td>54.6%/$197.5</td>
<td>60.5%</td>
<td>68.1%</td>
<td>75.5%</td>
</tr>
<tr>
<td>1,600</td>
<td>38.5%</td>
<td>47.1%</td>
<td>55.3%</td>
<td>65.6%/$246.7</td>
<td>71.5%</td>
<td>79.4%</td>
<td>87.2%</td>
</tr>
<tr>
<td>1,700</td>
<td>48.2%</td>
<td>57.0%</td>
<td>65.6%</td>
<td>75.8%/$293.4</td>
<td>82.3%</td>
<td>90.5%</td>
<td>98.7%</td>
</tr>
<tr>
<td>1,800</td>
<td>57.5%</td>
<td>66.4%</td>
<td>75.6%</td>
<td>86.5%/$342.9</td>
<td>93.0%</td>
<td>101.4%</td>
<td>109.8%</td>
</tr>
</tbody>
</table>

#### After-tax IRR(%)/NPV5%(C$)

<table>
<thead>
<tr>
<th>LOM Capital Cost Change (%)</th>
<th>Total Operating Cost (C$/tonne)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$110.00</td>
</tr>
<tr>
<td></td>
<td>$128.67 (base case)</td>
</tr>
<tr>
<td></td>
<td>$150.00</td>
</tr>
<tr>
<td>-25%</td>
<td>80.9%/$234.9</td>
</tr>
<tr>
<td>-15.0%</td>
<td>67.6%/$213.2</td>
</tr>
<tr>
<td>C$255.2M (base case)</td>
<td>51.6%/$180.1</td>
</tr>
<tr>
<td>+15.0%</td>
<td>39.6%/$148.2</td>
</tr>
<tr>
<td>+25%</td>
<td>32.8%/$126.4</td>
</tr>
</tbody>
</table>

### Notes:

1. Refer to endnote #1 for further details
2. Refer to endnote #2 for further details
3. Refer to endnote #3 for further details
**Structural Interpretation**

Comparison of structural interpretations of the F2 Gold Deposit

- **Riedel vein system:** System of mineralized quartz-actinolite veins that appear to be primary structural controls on gold mineralization at the F2 Gold Deposit.

- **More continuity** of gold mineralization within the HiTi Basalt Units (main host rock) compared to the 2016 geological model.

- **Evaluating bulk mining methods:** Test mining sublevel longhole method on current test stopes.

(7) Refer to endnote #7

**Plan Views**

<table>
<thead>
<tr>
<th>2013 Structural Interpretation</th>
<th>2016 Structural Interpretation</th>
<th>2018 Structural Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1.1 Moz Indicated; 2.2 Moz Inferred)</td>
<td>(0.1 Moz Indicated; 0.3 Moz Inferred)</td>
<td>(0.28 Moz M+I; 0.75 Moz Inferred)</td>
</tr>
</tbody>
</table>

**Historical drill holes**
- HiTi Basalt Units
- Ultramafic Flow Units
- High-grade domain

**Mineralized Riedel veins (orientations):**
- R' veins
- R veins
- P veins

**D1 N-S structures**

**D2 E-W structures**

**D2 dextral transpersion**

North (mine-grid)

(7) Refer to endnote #7
## Recent Land Transactions in Red Lake

Rubicon owns a sizeable land package in Red Lake

<table>
<thead>
<tr>
<th>Date</th>
<th>Property</th>
<th>Size (ha)</th>
<th>Seller</th>
<th>Buyer</th>
<th>Sale price*</th>
<th>Price/ha</th>
<th>Additional info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2017</td>
<td>McCuaig (40%)</td>
<td>50</td>
<td>Golden Tag</td>
<td>Rubicon</td>
<td>C$0.7 M</td>
<td>C$14,630/ha</td>
<td>Land transaction</td>
</tr>
<tr>
<td>Mar 2017</td>
<td>Derlak (near Madsen)</td>
<td>219</td>
<td>Orefinders</td>
<td>Pure Gold</td>
<td>C$1.2 M</td>
<td>C$5,465/ha</td>
<td>Land transaction</td>
</tr>
<tr>
<td>Dec 2015</td>
<td>Buffalo claims (near Hasaga)</td>
<td>513</td>
<td>Pure Gold</td>
<td>Premier Gold</td>
<td>~C$5.0 M</td>
<td>C$9,747/ha</td>
<td>Land transaction; Pure Gold gets 1.0% NSR</td>
</tr>
<tr>
<td>Nov 2015</td>
<td>Springpole</td>
<td>32,448</td>
<td>Gold Canyon</td>
<td>First Mining Gold</td>
<td>~C$56.2 M</td>
<td>C$1,732/ha</td>
<td>Company acquisition; MRE</td>
</tr>
<tr>
<td>Jun 2014</td>
<td>Newman-Madsen</td>
<td>&gt;807</td>
<td>Sabina Gold &amp; Silver</td>
<td>Pure Gold</td>
<td>~C$2.8 M</td>
<td>C$3,463/ha</td>
<td>Land transaction</td>
</tr>
<tr>
<td>Mar 2014</td>
<td>Madsen</td>
<td>4,193</td>
<td>Claude Resources</td>
<td>Pure Gold</td>
<td>~C$8.8 M</td>
<td>C$2,087/ha</td>
<td>Asset transaction 500 tpd mill, MRE</td>
</tr>
</tbody>
</table>

### Rubicon Red Lake Exploration Land Package (excluding Phoenix Gold Project claim)

28,266 ha

*Total consideration of cash and share values at the time of acquisition

Source: Company reports and Rubicon estimates
1. The New PEA summarized in this presentation is only a conceptual study of the potential viability of the Project’s mineral resource estimates, and the economic and technical viability of the Project and its estimated mineral resources has not been demonstrated. The New PEA is preliminary in nature and provides only an initial, high-level review of the Project’s potential and design options; there is no certainty that the New PEA will be realized. The New PEA conceptual LOM plan and economic model include numerous assumptions and mineral resource estimates.

2. The 2019 Mineral Resource Estimate is based on 3.0 g/t Au cut-off grade. For more information on the 2019 Mineral Resource Estimate refer to the Rubicon news release dated March 29, 2019 and Technical Report filed on www.sedar.com on April 25, 2019, which are available under the Company’s profile on SEDAR (www.sedar.com) or on the Company website (www.rubiconminerals.com). There is no guarantee that Inferred mineral resource estimates will be converted to Indicated or Measured mineral resources, or that Indicated or Measured resources can be converted to mineral reserves. Inferred mineral resource estimates are considered to be too speculative geologically to have any economic considerations applied to such estimates. Mineral resources that are not mineral reserves do not have demonstrated economic viability, and as such there is no guarantee the Project economics described herein will be achieved. Mineral resource estimates may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant risks, uncertainties and other factors, as more particularly described in the Cautionary Statements at the beginning of this presentation.

3. This news release uses the terms “Measured” and “Indicated” Mineral Resources and “Inferred” Mineral Resources. The Company advises U.S. investors that while these terms are recognized and required by the Canadian Securities Administrators, they are not recognized by the United States Securities and Exchange Commission (SEC). The estimation of “Measured” and “Indicated” Mineral Resources involves greater uncertainty as to their existence and economic feasibility than the estimation of Proven and Probable Reserves. The estimation of “Inferred” Mineral Resources involves far greater uncertainty as to their existence and economic viability than the estimation of other categories of Mineral Resources. It cannot be assumed that all or any part of a “Inferred”, “Measured”, or “Indicated” Mineral Resource estimate will ever be upgraded to a higher category. Under Canadian rules, estimates of “Inferred Mineral Resources” may not form the basis of feasibility studies, pre-feasibility studies or other economic studies, except in prescribed cases, such as in a preliminary economic assessment (or New PEA) under certain circumstances. The SEC normally only permits issuers to report mineralization that does not constitute “Reserves” as in-place tonnage and grade without reference to unit measures. Under U.S. standards, mineralization may not be classified as a “Reserve” unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the Reserve determination is made. U.S. investors are cautioned not to assume that any part or all of a “Inferred”, “Measured” or “Indicated” Mineral Resource exists or is economically or legally mineable. Information concerning descriptions of mineralization and Mineral Resources contained herein may not be comparable to information made public by U.S. companies subject to the reporting and disclosure requirements of the SEC.

4. For more information on the 2018 bulk sample reconciliation results, please refer to the news release on November 29, 2018, which is available on our website at www.rubiconminerals.com. Results viewed by Golder Associates Ltd. and an accounting of gold ounces in the mill was reconciled to less than 0.5%, numbers may not add up due to rounding. Rubicon estimates assumes zero grade for unplanned (external) mining dilution and based on a 3.0 g/t Au cut-off grade. Projected throughput is based on a 22-hour mill availability.

5. As of August 16, 2019, at 5:00pmET. Source: www.Kitco.com

6. The potential quantity and grade of these Explore Target areas is conceptual in nature. There has been insufficient exploration of the Explore Target areas to define a mineral resource estimate and it is uncertain if further exploration will result in any part of these target areas being delineated as a mineral resource.


8. For more information on the Island Zone drill results, please refer to the news release on September 30, 2004, which is available on our website at www.rubiconminerals.com.

9. For more information on the CARZ drill results, please refer to the news release on June 17, 2015, which is available on our website at www.rubiconminerals.com.

10. For more information on the Historic McFinley Deposit, please refer to the Mineral Deposit Inventory for Ontario, MENDM which is available at http://www.geologyontario.mndm.gov.on.ca/mndmfiles/mdi/data/records/MDIS2N045E0000S5.html

11. For more information on the recent McFinley deep drilling, please refer to the news release on February 20, 2018, which is available on our website at www.rubiconminerals.com.

12. For more information on the historical McCuaig drill results, please refer to the news release on May 4, 2005, which is available on our website at www.rubiconminerals.com.
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