PALEOPLACERS:

Are Archean/Proterozoic diamondiferous placers/paleoplacers potentially new sources of diamond supply to meet the looming diamond shortage?

John Ryder P.Geo
DISCLAIMER

Certain information contained in this presentation constitutes forward-looking statements. Forward-looking statements are frequently characterized by words such as "plan," "expect," "project," "intend," "believe," "anticipate" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements are based on the opinions and estimates of management at the date the statements are made, and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. These factors include the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drilling results and other ecological data, fluctuating commodity prices, the possibility of project cost overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future and other factors. The Corporation undertakes no obligation to update forward-looking statements if circumstances or management’s estimates or opinions should change. The reader is cautioned not to place undue reliance on forward-looking statements.
Diamond Market Fundamentals

- Global production declining with ageing mines
- World diamond reserves in decline, no new major primary diamond discoveries in past 17-20 years*
- Diamond demand growing in BRIC countries
- Diamonds becoming a safe haven like gold
- 1 million carat rough diamond shortfall in 2012

Diamond Market Demand (1)

- The USA: 38% of global demand;
- China/Hong Kong: 11% of global demand currently\(^1\).
- China and India should account for >50% of incremental global demand growth to 2017\(^1\).
- Chinese jewellery giant Chow Thai Fook is planning to open 1,000 new jewellery stores by 2020\(^2\).
- If Chinese middle class diamond demand is equivalent to that of Taiwan, the global diamond industry must double diamond supply annually to meet the incremental demand\(^1\).

Diamond Market Demand (2)

Demand for diamond jewelry in major markets, 2010, $ billions

- United States: 25.1
- China*: 7.8
- India: 7.3
- Japan: 6.0
- Persian Gulf: 5.6
- Others: 8.4

Growth rate 2000-2007**
- United States: 5%
- China*: 17%
- India: 13%
- Japan: -2%
- Persian Gulf: 12%
- Others: 4%

*China includes Hong Kong; **Polished-diamond market growth rates are shown for China, India and Persian Gulf; “Others” include Europe and the remaining geographies. Others’ growth rates were estimated by Bain. Growth rates in 2002–2007 show long-term trends and exclude the impact of the economic crisis.

Source: Bain Report 2011
2010: 133 Mct
2011: 124 Mct
2012: 120 -130 Mct
2012:
Diavik: Lower production to 7.4 Mcts
Ekati: Down 20%+
Alrosa: Lower production 7%??
Rio Tinto expects 7% increase in production

Source: Alrosa 2011
Diamond Producers (1)

Map by Geology.com and MapResources. Data from USGS Mineral Commodity Summaries.
Diamond Producers (2)

Source: Bain report, December 2011

Graph by Geology.com
Diamond Market Pricing

Source: Bain report, December 2011
Kimberlite (Primary)

Source: Botswana Diamonds
Diamond Producers (1)

PRIMARY DIAMOND DEPOSITS: KIMBERLITE/LAMPROITE MINES

Adapted from Botswana Diamonds PLC.
## Exhibit 4: Global diamond producers

<table>
<thead>
<tr>
<th>Project</th>
<th>Company</th>
<th>Location</th>
<th>Start-up date</th>
<th>Ore reserves (m tonnes)</th>
<th>Grade (cpht)</th>
<th>Total carats (m carats)</th>
<th>Price (US$/carat)</th>
<th>Revenue (US$/carat)</th>
<th>Production (m carats/year)</th>
<th>Expected mine life (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkhangel</td>
<td>Severalmaz</td>
<td>Russia</td>
<td>2006</td>
<td>110.0</td>
<td>52.0</td>
<td>57.0</td>
<td>48</td>
<td>25</td>
<td>5.0</td>
<td>20</td>
</tr>
<tr>
<td>Gomatchia</td>
<td>Endiama</td>
<td>Angola</td>
<td>2008</td>
<td>80.0</td>
<td>17.0</td>
<td>14.0</td>
<td>200</td>
<td>34</td>
<td>1.0</td>
<td>12</td>
</tr>
<tr>
<td>Catoca</td>
<td>Endiama</td>
<td>Angola</td>
<td>1997</td>
<td>271.0</td>
<td>70.0</td>
<td>188.0</td>
<td>78</td>
<td>55</td>
<td>6.7</td>
<td>20</td>
</tr>
<tr>
<td>Cullinan</td>
<td>Petra</td>
<td>South Africa</td>
<td>1910</td>
<td>137.0</td>
<td>37.1</td>
<td>208.0</td>
<td>120</td>
<td>45</td>
<td>0.5</td>
<td>20</td>
</tr>
<tr>
<td>Damshaa</td>
<td>Debswana</td>
<td>Botswana</td>
<td>2002</td>
<td>38.0</td>
<td>17.0</td>
<td>8.0</td>
<td>101</td>
<td>17</td>
<td>0.5</td>
<td>30</td>
</tr>
<tr>
<td>Diavik</td>
<td>Rio+Hwiel</td>
<td>Canada</td>
<td>2003</td>
<td>28.0</td>
<td>31.1</td>
<td>96.0</td>
<td>120</td>
<td>373</td>
<td>2.0</td>
<td>22</td>
</tr>
<tr>
<td>Ekati</td>
<td>BHP</td>
<td>Canada</td>
<td>1998</td>
<td>78.0</td>
<td>100.0</td>
<td>85.0</td>
<td>200</td>
<td>218</td>
<td>2.4</td>
<td>18</td>
</tr>
<tr>
<td>Jubilee</td>
<td>Alrosa</td>
<td>Russia</td>
<td>1996</td>
<td>304.0</td>
<td>11.0</td>
<td>32.0</td>
<td>100</td>
<td>11</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Jwaneng</td>
<td>Debswana</td>
<td>Botswana</td>
<td>1982</td>
<td>268.0</td>
<td>141.0</td>
<td>413.0</td>
<td>143</td>
<td>262</td>
<td>13.7</td>
<td>25</td>
</tr>
<tr>
<td>Koffiefonteln</td>
<td>Petra</td>
<td>South Africa</td>
<td>2007</td>
<td>103.0</td>
<td>5.9</td>
<td>4.0</td>
<td>470</td>
<td>28</td>
<td>0.1</td>
<td>20</td>
</tr>
<tr>
<td>Lethakhane</td>
<td>Debswana</td>
<td>Botswana</td>
<td>1975</td>
<td>68.0</td>
<td>26.0</td>
<td>16.0</td>
<td>243</td>
<td>63</td>
<td>1.2</td>
<td>NA</td>
</tr>
<tr>
<td>Leibeng</td>
<td>Gem</td>
<td>Lesotho</td>
<td>2004</td>
<td>222.0</td>
<td>1.7</td>
<td>3.7</td>
<td>3291</td>
<td>56</td>
<td>0.1</td>
<td>35</td>
</tr>
<tr>
<td>Lomonosov</td>
<td>Alrosa</td>
<td>Russia</td>
<td>NA</td>
<td>150.0</td>
<td>80.0</td>
<td>128.0</td>
<td>63</td>
<td>51</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Miuрова</td>
<td>Rio Tinto</td>
<td>Zimbabwe</td>
<td>2004</td>
<td>165.5</td>
<td>90.0</td>
<td>14.8</td>
<td>66</td>
<td>59</td>
<td>0.3</td>
<td>50</td>
</tr>
<tr>
<td>Orapa</td>
<td>Debswana</td>
<td>Botswana</td>
<td>1971</td>
<td>NA</td>
<td>85.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>9.5</td>
<td>NA</td>
</tr>
<tr>
<td>Snap Lake</td>
<td>De Beers</td>
<td>Canada</td>
<td>2007</td>
<td>18.0</td>
<td>108.0</td>
<td>27.0</td>
<td>140</td>
<td>151</td>
<td>0.9</td>
<td>20</td>
</tr>
<tr>
<td>Udachnaya</td>
<td>Alrosa</td>
<td>Russia</td>
<td>1996</td>
<td>150.0</td>
<td>165.0</td>
<td>91.0</td>
<td>85</td>
<td>141</td>
<td>9.0</td>
<td>NA</td>
</tr>
<tr>
<td>Veneta</td>
<td>De Beers</td>
<td>South Africa</td>
<td>1992</td>
<td>117.0</td>
<td>110.7</td>
<td>116.0</td>
<td>85</td>
<td>94</td>
<td>7.5</td>
<td>11</td>
</tr>
<tr>
<td>Victor</td>
<td>De Beers</td>
<td>Canada</td>
<td>2007</td>
<td>28.0</td>
<td>31.0</td>
<td>6.0</td>
<td>320</td>
<td>99</td>
<td>0.8</td>
<td>10</td>
</tr>
<tr>
<td>Voslooqoed</td>
<td>De Beers</td>
<td>South Africa</td>
<td>2008</td>
<td>50.0</td>
<td>20.0</td>
<td>10.0</td>
<td>150</td>
<td>30</td>
<td>0.8</td>
<td>12</td>
</tr>
<tr>
<td>Williamson</td>
<td>Petra</td>
<td>Tanzania</td>
<td>1940</td>
<td>955.0</td>
<td>62.0</td>
<td>46.0</td>
<td>175</td>
<td>11</td>
<td>0.1</td>
<td>19</td>
</tr>
</tbody>
</table>

Average (excluding highest & lowest) | 135.1 | 62.2 | 62.9 | 159 | 77 | 3.1 | 20

Source: Desjardins 2011
Exploration Expenditures

Exhibit 7: Global diamond exploration spending (2003–10)

Source: Desjardins 2011
## Exhibit 5: Global diamond development projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Company</th>
<th>Location</th>
<th>Start up date</th>
<th>Ore reserves (m tonnes)</th>
<th>Grade (cph)</th>
<th>Total carats (m carats)</th>
<th>Price (US$/carat)</th>
<th>Production (m carats/year)</th>
<th>Expected mine life (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK6</td>
<td>Lucara</td>
<td>Botswana</td>
<td>2011</td>
<td>72.0</td>
<td>20.0</td>
<td>15.0</td>
<td>1.62</td>
<td>1.3</td>
<td>11</td>
</tr>
<tr>
<td>Bunder</td>
<td>Rio Tinto</td>
<td>India</td>
<td>NA</td>
<td>37.0</td>
<td>75.0</td>
<td>27.6</td>
<td>50</td>
<td>0.7</td>
<td>37</td>
</tr>
<tr>
<td>D0-27</td>
<td>Peregrine</td>
<td>Canada</td>
<td>NA</td>
<td>19.5</td>
<td>94.0</td>
<td>18.2</td>
<td>51</td>
<td>1.0</td>
<td>NA</td>
</tr>
<tr>
<td>Gahcho Kué</td>
<td>De Beers/MP</td>
<td>Canada</td>
<td>2014</td>
<td>31.0</td>
<td>157.0</td>
<td>49.0</td>
<td>172</td>
<td>4.5</td>
<td>11</td>
</tr>
<tr>
<td>Grib</td>
<td>AGD/ADC</td>
<td>Russia</td>
<td>NA</td>
<td>88.0</td>
<td>68.0</td>
<td>67.0</td>
<td>110</td>
<td>4.0</td>
<td>NA</td>
</tr>
<tr>
<td>Gope</td>
<td>Gem</td>
<td>Botswana</td>
<td>2013</td>
<td>105.0</td>
<td>19.4</td>
<td>20.5</td>
<td>203</td>
<td>0.6</td>
<td>30</td>
</tr>
<tr>
<td>Kao</td>
<td>Global</td>
<td>Lesotho</td>
<td>2011</td>
<td>188.0</td>
<td>17.3</td>
<td>12.6</td>
<td>146</td>
<td>0.3</td>
<td>25</td>
</tr>
<tr>
<td>Lerato</td>
<td>Marrie</td>
<td>Botswana</td>
<td>NA</td>
<td>19.9</td>
<td>28.3</td>
<td>4.1</td>
<td>55</td>
<td>0.4</td>
<td>9</td>
</tr>
<tr>
<td>Merlin</td>
<td>NA Diamonds</td>
<td>Australia</td>
<td>2012</td>
<td>33.0</td>
<td>24.0</td>
<td>7.1</td>
<td>200</td>
<td>0.1</td>
<td>10</td>
</tr>
<tr>
<td>Mothae</td>
<td>Lucara</td>
<td>Lesotho</td>
<td>NA</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>549</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Renard</td>
<td>Stornoway</td>
<td>Canada</td>
<td>2015</td>
<td>57.7</td>
<td>71.0</td>
<td>46.0</td>
<td>164</td>
<td>1.2</td>
<td>25</td>
</tr>
<tr>
<td>Star-Oro South</td>
<td>Shore Gold/Newmont</td>
<td>Canada</td>
<td>2016</td>
<td>279.0</td>
<td>12.3</td>
<td>34.4</td>
<td>242</td>
<td>1.7</td>
<td>20</td>
</tr>
<tr>
<td><strong>Average (excluding highest &amp; lowest)</strong></td>
<td><strong>57.8</strong></td>
<td><strong>40.2</strong></td>
<td><strong>20.9</strong></td>
<td><strong>125</strong></td>
<td><strong>1.0</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Mountain Province Diamonds Inc., Peregrine Diamonds Ltd., company reports
A paleplacer is a fossilized placer deposit. In other words, the unconsolidated deposits originally formed at the surface by running water was buried to sufficient depth to lithify the sediment into solid sedimentary rock (GEOL3600).
Secondary Diamond Deposits

SECONDARY DIAMOND DEPOSITS: PALEOPLACERS

Adapted from Konstantinovski 2003
Paleoplacer - Timescale

Modified from NWT Geoscience office.
Australia-Oldest Diamonds

Nullagine

Merlin

Argyle

Ellendale

---Nullagine

---Jack Hills

Perth

Sydney

1000 km
Jack Hills/ Nullagine

- The **Jack Hills** are best known as the source of the oldest material of terrestrial origin (Gneiss of Kilgam Craton) found to date: zircons that formed around 4.4 billion years ago.
- Diamonds as inclusion in the zircons, dated at 3.7 Ma, found in sedimentary siliclastic rocks that include BIF, quartzite, mature metaconglomerates, interlayered meta sandstoneschert, in 80 km belt, interpreted as fan delta deposits (*Baxter et al 1986)*.
- The Nullagine area to the North, part of the Pilbara Craton contains gold and uranium conglomerates with local commercial grade diamonds.
- Discovered in 1902, Australia’s first diamond discovery.
- In conglomerate beds of the Hardy Formation of the 2.5 – 3 km thick basal Fortesque Group which sit unconformably on the Pilbara Craton.
Nullagine Area
Nullagine: Paleoplacer Facts:

- **Host Rock:** Conglomerate unit in quartzite sandstone
- **Age:** Archean - 2.7ma
- **Thickness:** 2 to 5 metres, locally 40 -60 metres
- **Extent:** 10 kms along strike
- **Type & Origin:** Quartz pebble, coastal-marine
- **Diamond:**
  - **Content/Grade:** not uniform but highs of 75 to 100 cpht
  - **Average size:** 0.25 carats, high quality, colorless, transparent
  - **Largest:** 3.5 carats
  - **Predominant crystal shape:** Octahedron
- **Other minerals:** Pyrite, Gold, Uranium
- **Primary source:** Unknown, Kimberlite???
- **Similar deposits/settings:**
  - Jacobina ore field (Au & U bearing reef) in Brazil
  - Elliot Lake conglomerates
  - Witwatersrand conglomerates
African Paleoplacers

Map of Africa showing different regions labeled Ty, Tk, MI, M, and W.
Witwatersrand

Diamondiferous Conglomerates
Witwatersrand: Facts

- **Host Rock:** Conglomerates of Upper series of Witwatersrand Supergroup
  Only found in two of the eight gold fields
- **Age:** Archean 2.5 - 2.89 Ma
- **Thickness:** 3 metres, locally ???/? metres
- **Extent:** 10 ??kms along ore reefs.
- **Type & Origin:** Quartz pebble, Fluvial (braided streams) paleofans (deltas)
- **Diamond:**
  - Content/Grade: Only a few hundred diamond recovered.
  - Average size: 0.1 to 0.25 carats, high quality. Green superficial coating
  - Largest: 1.5 - 8 carats
  - Predominant crystal shape: ????
- **Other minerals:** Pyrite, Gold, Uranium
- **Primary source:** Unknown, Kimberlite???
- **Similar deposits/settings:**
  - Jacobina ore field (Au & U bearing reef) in Brazil
  - Elliot Lake
  - Nullagine
Cameroon

**Paleoplacers.**

1. Mobilong Zone
2. Libongo Area

**Other Diamond occurrences (placers)**
Cameroon Geology

Diamond Region: Paleoplacers.
Mobilong (CNK Mining)
Libongo (Botswana Diamonds Ltd.)

Source: Cameroon Ministry of Industry, Mining and Development
1. New paleo-conglomerate diamond field emerging in east Cameroon since initial exploration commenced in 2006. Artisinal mining since 1930’s CAR

2. CNK Mining (Korean) are constructing a 1 million carat p.a. mine in Mobilong. Construction commenced in March 2012

3. Exploration on surrounding areas: Botswana Diamonds Plc.: 482 sq. km concession area

4. Large area on Congo Craton in Cameroon unexplored

Source; Botswana Diamonds Plc.
MOBILONG (1)

Map of Mobilong Conglomerates

Estimated Diamond Reserve

Dr. Gentry, Ministry of Industry, Mines & development
2010

Initial Euphoria!!!!

<table>
<thead>
<tr>
<th>Area</th>
<th>Average thickness (m)</th>
<th>Fold Factor</th>
<th>Grade (ct/m³)</th>
<th>Total Reserve (cts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000m (N–S) x 3,000m (E–W)</td>
<td>100</td>
<td>1.8</td>
<td>0.7 CNK;</td>
<td>3,780,000,000 CNK;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>420,000,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Cameroon Ministry of Industry, Mining and Development
MOBILONG (2)

Source: Cameroon Ministry of Industry, Mining and Development
Libongo

- 480sq km of Exploration License – Botswana Diamonds Ltd.
- Several outcrops of paleo-conglomerate identified
- Three diamonds already found, helping to confirm value of the resource 0.25 and 2 carat near gem, and 1.3 carat industrial.
- Evidence of artisanal workings in area;
- Three 100 tonne bulk samples still in progress

Source: Botswana Diamonds Plc.
Cameroon: Paleoplacer Facts:

- **Host Rock:** Mobilong quartz pebble Conglomerates over extensive area
- **Age:** Archean 2.7 Ma
- **Thickness:** 200 metres
- **Extent:** 10 kms along ore reefs.
- **Type & Origin:** Quartz pebble, Fluvial (braided streams) paleofans (deltas)
- **Diamond:**
  - **Content/Grade:** unconfirmed 12 cph
  - **Average size:** ? carats, mixed quality.
  - **Largest:** 2 carats
  - **Predominant crystal shape:** ???
- **Other minerals:** Gold, (Uranium – not known)
- **Primary source:** Unknown, Kimberlite
- **Similar deposits/settings:** Not enough available information. Size and thickness ---Wawa Leadbetter deposit in Ontario

  Diamondfield in early stage of exploration and study.
Zimbabwe: Emerging Diamond Powerhouse?

1. It is likely that Zimbabwe will be among the top diamond producers. From 10% to 25% of world's rough by 2018.

2. 2011 diamond production 8.5 to 11.1 million carats, an 1,000% increase in 3 years. 14.5 mc by 2014?

3. 96% of production from placer/paleoplacers of the Marange - Chiadzwa fields
“To be sure, we have not been able to verify information on Marange because the official position is that this information is not supposed to be made public. Nevertheless, the scale of operations by Anjin in particular and Mbada, to a lesser extent, suggest that the massive production figures proffered are plausible” Independent consultants Equity Communications

Politically unstable country
Zimbabwe - Geology

M: Marange Diamond fields:
   Placers & paleoplacers

Mw: Murowa kimberlite

Rr: River Ranch kimberlite
The Marange diamond fields are spread out over 566 kilometers area, a 70km long belt from the Chiadzwa district of Marange to the Chimanimani Mountains.

Diamond grades are from 4,000 to 8,000 cpht with average diamond size of 5 carats. Prices range from $3 to $60 per carat.

< 15% of the diamonds are gems and sell at higher prices up to $132 per carat.

Potential revenue is estimated at US$1 billion-US$1.7 billion a year.

Only 20% of the diamondfields allocated.

Number of mining operations in existance: largest are Mbada and Anjin.
Concession Blocks: Marange

Marange diamond fields, concession blocks, as of 2010.

Source: Global Witness February 2012
Marange: Mbada Mining

- Production commenced in December 2010
- Capital expenditure $185 million.
- Producing 150,000 rough carats per month. 12 million carats produced since January 2011
- 1,000 ha concession area, to increase to 7,700 ha.
- Life of mine 25 years based on 1,000 ha DMS production at 50 tph increasing to 200 tph DMS capacity
Marange: Anjin Mining

Mining Commenced: 2012
$400 million capital expenditure
Production target: 1 million carats per year
Conglomerate: 0.6 to 1.5 m thick
By 2018 expected to produce 10% of global rough.
Marange Diamonds
Chimanimani

- 70 kms south of Marange.
- Diamonds discovered in 2008.
- Exploration commenced in 2011
- Pilot plant producing 1,000 carats per month (June 2012)
- Diamonds valued $120 per carat (October 2012)
- Diamonds smaller and lower grade than Marange.
- Current 80,000 carat reserve
- Same geology/age as Marange - Umkondo???
- Conglomerate is < 1 metre thick.
Zimbabwe: Paleoplacer Facts:

- **Host Rock**: Thin Conglomerates over extensive area
- **Age**: Archean 2.7 Ma or Proterozoic 1.5 Ma
- **Thickness**: 0.6 to 1.5 m
- **Extent**: 70kms by 6 kms
- **Type & Origin**: Unknown
- **Diamond**:
  - Content/Grade: 4,000 - 8,000 cpht placer: 100 – 600 cpht
  - Average size: 5 carats, < 15% gem
  - Largest: 50+ carats?
  - Predominant crystal shape: ????
- **Other minerals**: Gold, (Uranium – not tested)
- **Primary source**: Unknown, Kimberlite
- **Similar deposits/settings**: Not enough available information.

Technical knowledge – “State Secret”
Canada: Diamond Deposits
Canadian Plaeoplacers

Leadbetter Project

1.52 carat

PEM 1404
Wawa Paleoplacer

LARGE UNDEVELOPED PALEOPLACER
- 549 to 583 million tonnes
- 2.7 billion years old

(from Leadbetter 70 tonnes sample)  (illustration only)  (from Leadbetter 6 tonnes sample)
Leadbetter Deposit

2.7Ma Archean Conglomerate

Approx. 566 Mt
NEW DIAMOND DISCOVERIES

2.7 Ma ARCHEAN CONGLOMERATES
JAMES BAY, QUEBEC

PEM 1404 & EMOKIAX V PROPERTIES

-212 mm x +150 mm

RARE PURPLE DIAMOND RECOVERED FROM A 40.16 Kg CONGLOMERATE ROCK SAMPLE (107 DIAMONDS) PEM 1404 PROPERTY
(press release March 3rd, 2008)

DIAMOND RECOVERED FROM A 34.75 Kg CONGLOMERATE ROCK SAMPLE (1296 DIAMONDS) PEM 1404 PROPERTY

DESCRIBED AS COLORLESS, CLEAR, OCTAHEDRON
(press release May 13th, 2008)

WWW.DIANOR.COM
## Paleoplacer Summary

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Age</th>
<th>Diamodiferous Units</th>
<th>Thick ness</th>
<th>Extent</th>
<th>Potential</th>
<th>Average</th>
<th>Largest</th>
<th>Grade</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nullagine</td>
<td>Australia</td>
<td>2.7 Ma</td>
<td>Hardly FM</td>
<td>2 - 60m</td>
<td>10kms</td>
<td>700 Mt +</td>
<td>0.25</td>
<td>3.5</td>
<td>75 - 100</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50sq.km +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fortestque Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witwatersrand</td>
<td>South Africa</td>
<td>2.5-2.89</td>
<td>Upper Series</td>
<td>3m</td>
<td>10kms</td>
<td>700Mt+</td>
<td>?</td>
<td>8</td>
<td>?</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Two reefs to 4 Billion</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilong</td>
<td>Cameroon</td>
<td>2.7 Ma</td>
<td>Mobilong Congl.</td>
<td>100 m</td>
<td>10kms</td>
<td>18 Mt to 420Mt</td>
<td>?</td>
<td>&gt;3</td>
<td>25?</td>
<td>Medium</td>
</tr>
<tr>
<td>Libongo</td>
<td>Cameroon</td>
<td>2.7 Ma</td>
<td>mobilong Congl.</td>
<td>100+ m</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>2</td>
<td>?</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>Cameroon</td>
<td>2.7 Ma</td>
<td>Mobilong Congl.</td>
<td>200 m</td>
<td>6kms</td>
<td>1.7 billion</td>
<td>?</td>
<td>?</td>
<td>12</td>
<td>?</td>
</tr>
<tr>
<td>Marange</td>
<td>Zimbabwe</td>
<td>1.5Ma??</td>
<td>?</td>
<td>1.5 m</td>
<td>70 Kms+</td>
<td>500Mt+</td>
<td>5</td>
<td>?</td>
<td>100 - 500?</td>
<td>&lt;15%</td>
</tr>
<tr>
<td>Chimnimani</td>
<td>Zimbabwe</td>
<td>1.5Ma??</td>
<td>Umkondo ??</td>
<td>0.5 m</td>
<td>5 Kms+</td>
<td>10 - 20Mt+</td>
<td>5</td>
<td>?</td>
<td>100 - 500?</td>
<td>&lt;15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wawa</td>
<td>Canada</td>
<td>2.7 Ma</td>
<td>Leadbetter Conglomerate</td>
<td>200m</td>
<td>5 kms+</td>
<td>600 Mt+</td>
<td>?</td>
<td>1.5</td>
<td>42</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

Paleoplacers are underexplored and recent discoveries in Africa and Canada make the case for development of these deposits to alleviate future diamond shortages.

Potential for large tonnage low-moderate grade open pit deposits
Final Conclusion

When we run out of diamonds on Earth perhaps MARS would make a good Paleoplacer exploration play!!!!!