HATHOR EXPLORATION LIMITED

URANIUM EXPLORATION in the ATHABASCA BASIN

January 2009
Cautionary Statement Regarding Forward-looking Information

The material presented herein is private and confidential.

Statements contained in this presentation which are not historical facts are forward-looking statements that involve risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Factors that could cause such differences, without limiting the generality of the following, include: risks inherent in exploration activities; volatility and sensitivity to market prices for uranium; volatility and sensitivity to capital market fluctuations; the impact of exploration competition; the ability to raise funds through private or public equity financings; imprecision in resource and reserve estimates; environmental and safety risks including increased regulatory burdens; unexpected geological or hydrological conditions; a possible deterioration in political support for nuclear energy; changes in government regulations and policies, including trade laws and policies; demand for nuclear power; failure to obtain necessary permits and approvals from government authorities; weather and other natural phenomena; and other exploration, development, operating, financial market and regulatory risks. Although Hathor believes that the assumptions inherent in the forward-looking statements are reasonable, undue reliance should not be placed on these statements, which only apply as of the date of this material. Hathor disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. United States investors are advised that while the term “inferred” resources is recognized and required by Canadian regulations, the SEC does not recognize that term. Investors are cautioned not to assume that all or any part of mineral deposits in this category will ever be converted into reserves.
PEOPLE – Management

- Stephen Stanley  
  President, CEO & Director

- Matthew Mason  
  Director, Chairman

- Benjamin Ainsworth, P.Eng.  
  Director – V.P. Exploration

- John Currie, CA  
  Director – CFO of Lululemon athletica inc

- Martin Glynn  
  Director – Director of Husky Energy Inc

- Andriyko Herchak, CA  
  CFO

- Dale Wallster, B.Sc. Hons.  
  Geologist – Senior Technical Advisor
  Founder of Roughrider Uranium
PEOPLE – Technical Team

- Alistair McCready, Ph.D., M.Sc.  Technical Team
  Senior Project Geologist
- Tom Elash, B.Sc. Hons.  Technical Team – Project Geologist
- Brian Reilkoff, B.E., M.Sc., P.Geo.  Consulting Geophysicist
  3D Imaging Specialist
- Phil Robertshaw, M.Sc., P.Geo.  Consulting Geophysicist
- Zoltan Hajnal, Ph.D.  Seismological Research Adviser
  University of Saskatchewan
- Bhaskar Pandit, Ph.D., P.Geo.  Seismological Research Adviser
  University of Saskatchewan
- Irvine Annesley, Ph.D., P.Geo.  Consulting Geologist
  Scott Wilson Roscoe Postle
- Roughrider Uranium acquisition announced March 15, 2006
- Roughrider Uranium acquisition closed July 19, 2006
- Since the announcement of Roughrider acquisition, Hathor has raised over $55 million (net) at increased share prices
- Financing (closed June 12, 2008) for $15 million was an oversubscribed “Bought Deal” at $3 per share placed with nine institutions – no units & no flow-through
- Hathor has Working Capital of about $35 million
- Last financing (closed November 20, 2008) for $8 million at $3.10 per share
SHARE STRUCTURE

- Shares Issued 85,959,926
- Warrants 441,983
- Options 8,225,500
- Fully-Diluted 94,627,409

- Fully-Diluted Cash Position approximately $50,000,000
- Fully-Diluted Market Cap approximately $275,000,000

As at December 31, 2008
Athabasca Basin has the most prospective geology in the world to explore for high-grade, unconformity-style uranium deposits.
ATHABASCA BASIN – LARGEST PRODUCER in the WORLD

World Production 2005
Total 108M lb U₃O₈

(Source: WNA)
ATHABASCA BASIN – WHERE GRADE IS KING

GRADE (% U₃O₈)

<table>
<thead>
<tr>
<th>DEPOSIT</th>
<th>Grade (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rossing</td>
<td>0.037</td>
</tr>
<tr>
<td>Olympic Dam</td>
<td>0.088</td>
</tr>
<tr>
<td>Langer Heinrich</td>
<td>0.088</td>
</tr>
<tr>
<td>Inkai</td>
<td>0.57</td>
</tr>
<tr>
<td>Smith Ranch</td>
<td>0.12</td>
</tr>
<tr>
<td>Michelin uOg</td>
<td>0.12</td>
</tr>
<tr>
<td>Ranger</td>
<td>0.32</td>
</tr>
<tr>
<td>Sue E</td>
<td>1.07</td>
</tr>
<tr>
<td>Rabbit Lake</td>
<td>1.14</td>
</tr>
<tr>
<td>Millenium</td>
<td>4.83</td>
</tr>
<tr>
<td>Midwest</td>
<td>6.47</td>
</tr>
<tr>
<td>McArthur River</td>
<td>20.98</td>
</tr>
<tr>
<td>Cigar Lake</td>
<td>20.97</td>
</tr>
</tbody>
</table>
ATHABASCA BASIN REGIONAL AEROMAGNETICS
Location, Location, Location

Highly prospective diversified land package with 11 projects located in the world-class Athabasca Basin area

- Properties in close proximity to high-grade deposits and producing infrastructure of Cameco, AREVA & Denison Mines
Midwest NorthEast Project

Midwest A (Mae) Zone Mineralization
Includes drill results of:
- 11.67% U₃O₈ / 7.1 metres
- 6.25% U₃O₈ / 7.1 metres
- 15.30% U₃O₈ / 12.5 metres
- 12.40% U₃O₈ / 6.1 metres
- 9.50% U₃O₈ / 7.2 metres
~19.5 million lbs @ 1.57% U

Midwest Deposit
- 41.7 million lbs U₃O₈
- 345,500 tonnes grading:
  - 5.47% U₃O₈
  - 4.37% Ni
  - 0.33% Co

Basement Graphitic Conductor
Uranium Mineralization
Midwest NorthEast Project – From Roughrider Zone Discovery to …
Midwest NorthEast Project

Aerial View Looking East-Northeast

HATHOR / ROUGHRIDER MIDWEST NE PROJECT

Midwest A (“Mae”) Zone

McCLean Lake Mill

Midwest Shaft Site

Midwest Deposit

Provincial Highway # 905
Uranium Deposits – Depth to the Unconformity

After AREVA Resources Canada Inc.
Midwest NorthEast Project – Roughrider Zone Discovery

- **Roughrider Zone:** The best discovery in 20 years by a junior uranium company
  - Discovery in February, 2008
  - Discovery drill results of 11.9 metres grading 5.29% $\text{U}_3\text{O}_8$
  - Individual $\text{U}_3\text{O}_8$ assays grading up to 40.20% $\text{U}_3\text{O}_8$ over 20 cm
  - Nickel values including 17.22 % over 0.5 m
  - Cobalt values including 1.17% over 2 m
  - Molybdenum values including 0.54% over 4.2 m
Drill Program Highlights from Roughrider Zone

- 11.9 m grading 5.29 % U₃O₈, including 0.2 m at 40.20 % U₃O₈, in DDH 08-12
- 15.0 m grading 10.02 % U₃O₈, including 2.0 m at 43.85 % U₃O₈, in DDH 08-20
- 9.0 m grading 10.06 % U₃O₈, including 3.0 m at 22.72 % U₃O₈, in DDH 08-21
- 5.0 m grading 3.58 % U₃O₈, including 1.5 m at 10.85 % U₃O₈, in DDH 08-21
- 9.5 m grading 2.60 % U₃O₈, including 2.0 m at 10.39 % U₃O₈, in DDH 08-28
- 69.0 m grading 2.33 % U₃O₈, including 9.0 m at 10.54 % U₃O₈, in DDH 08-30
- 6.5 m grading 20.41 % U₃O₈ in DDH 08-32
- 46.0 m grading 3.25 % U₃O₈, including 7.0 m at 11.99 % U₃O₈, in DDH 08-33
- 6.5 m grading 8.93 % U₃O₈ in DDH 08-34
- 18.0 m grading 4.14 % U₃O₈, including 9.0 m at 8.22 % U₃O₈, in DDH 08-37
- 23.0 m grading 11.23 % U₃O₈, including 7.0 m at 28.14 % U₃O₈, in DDH 08-40
- 3.5 m grading 5.92 % U₃O₈ in DDH 08-42

*All intersections are down-hole, core-interval measurements, true thickness is yet to be determined
## Drill Program Highlights from Roughrider Zone

### Individual assay intervals* including:

<table>
<thead>
<tr>
<th>U₃O₈ (%)</th>
<th>Interval Details</th>
<th>US$/tonne</th>
<th>Au Equiv (oz/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.8%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-40</td>
<td>$95,372</td>
<td>132</td>
</tr>
<tr>
<td>59.1%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-21</td>
<td>$91,205</td>
<td>127</td>
</tr>
<tr>
<td>58.2%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-32</td>
<td>$89,816</td>
<td>125</td>
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<tr>
<td>57.5%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-20</td>
<td>$88,736</td>
<td>123</td>
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<tr>
<td>55.8%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-20</td>
<td>$86,113</td>
<td>120</td>
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<tr>
<td>49.3%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-40</td>
<td>$76,082</td>
<td>106</td>
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<tr>
<td>47.7%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-30</td>
<td>$73,612</td>
<td>102</td>
</tr>
<tr>
<td>45.9%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-40</td>
<td>$70,835</td>
<td>98</td>
</tr>
<tr>
<td>45.1%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-40</td>
<td>$69,600</td>
<td>97</td>
</tr>
<tr>
<td>41.8%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-34</td>
<td>$64,507</td>
<td>90</td>
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<tr>
<td>41.8%</td>
<td>U₃O₈ over 0.5 metres in drill hole MWNE-08-40</td>
<td>$64,507</td>
<td>90</td>
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<tr>
<td>40.2%</td>
<td>U₃O₈ over 0.2 metres in drill hole MWNE-08-12</td>
<td>$62,038</td>
<td>86</td>
</tr>
</tbody>
</table>

* All intersections are down-hole, core-interval measurements, true thickness is yet to be determined

** At $70/lb U₃O₈ and $720 / oz Au
Midwest NE Property – Bouguer Gravity

Roughrider Zone Discovery Area

Bouguer Gravity Values

Colour Bar Scale

Correction Density: 2.0 gm/cc
Contour Interval: 0.1 milliGal

Roughrider Zone Discovery Area
Roughrider Zone – Bouguer Gravity Anomaly

MWNE-08-12

Bouguer Gravity Values

Colour Bar Scale

Correction Density: 2.0 gm/cc
Contour Interval: 0.1 milliGal
Roughrider Zone – Maximum CPS Drill Intercepts & Gravity
“The mineralized structures also exhibit structurally controlled roots that go well down into the basement (as far as 70m beneath the unconformity). It was noted during the drill programs that if a mineralized graphitic structure was intersected in the basement, it could be followed up into the overlying sandstone where it would always produce a zone of strong mineralization. This is illustrated by hole MW-703, which intersected 2.2 metres at 0.3% eU approximately 20 metres beneath the unconformity. This led to the follow-up hole MW-706, which returned the best results of the summer 2006 program.”

Athabasca Deposits Are Small But Very Rich!

ZONE #2 ORE
~100m x 90m x 30m

ZONE #1 ORE

ZONE #3 ORE

ZONE #4 ORE

SHAFT #3

SHAFT #2

POLLOCK SHAFT

ORE SLURRY HOLES TO SURFACE

EXHAUST AIR

FRESH AIR

WASTE PASS

530 LEVEL

640 LEVEL

640 LEVEL

RETURN AIR RAISE

ORE SLURRY

McArthur River Underground
Since the Roughrider Zone Discovery news on February 26, 2008 Hathor has:

- Traded over 165 million shares
- Increased in share price from $0.50 per share to as high as $4.40 per share (a 780% share price increase)
CONTACTS:

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