Geological Framework of the Fox Lake Uranium Deposit, Athabasca Basin, Canada

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Magnetic Signature (TDR)

Legend

<table>
<thead>
<tr>
<th>Magnetic Tilt Derivative (radians)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.57</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1.57</td>
</tr>
</tbody>
</table>

- Major Fault
- Ground Conductor

0 1 2 3 4 Km

C10

P2

Geological Framework of the Fox Lake Deposit - Nov 28, 2017
Conductive Signature (ZTEM)
**Fox Lake Discovery Timeline**

- **2007**: First Mineralized Drillhole on C10 Corridor
- **2008**: High Grade Perched Mineralization - Fox Lake East
- **2011**: First Intersection Within Deposit Footprint
- **2013**: High Grade-Thickness Mineralization - Fox Lake West
- **2014**: High Grade-Thickness Mineralization - Fox Lake Central
- **2015**: Maiden Resource Estimate

**Steps:**
- Exploration
- Delineation
- Resource Evaluation

*Fox Lake Discovery Timeline* - Nov 28, 2017

Cameco
Fox Lake Discovery Timeline

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**Stepwise Moving Loop EM Conductors**
Fox Lake Discovery Timeline

- First Mineralized Drillhole on C10 Corridor
- High Grade Perched Mineralization - Fox Lake East
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- Maiden Resource Estimate

Timeline:
- 2007: First Mineralized Drillhole on C10 Corridor
- 2008: High Grade Perched Mineralization - Fox Lake East
- 2011: High Grade-Thickness Mineralization - Fox Lake West
- 2013: High Grade-Thickness Mineralization - Fox Lake Central
- 2014: Maiden Resource Estimate
- 2015: Exploration, Delineation, Resource Evaluation

Stepwise Moving Loop EM Conductors

First Intersection Within Deposit Footprint
Fox Lake Discovery Timeline

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- High Grade-Thickness Mineralization - Fox Lake West
- Maiden Resource Estimate

*Deposit Outline at 0.1% U₃O₈ cut-off grade

- REA-144

Timeline:
- 2007: Exploration
- 2008
- 2011: Delineation
- 2013
- 2014
- 2015: Resource Evaluation

Geological Framework of the Fox Lake Deposit - Nov 28, 2017
Fox Lake Discovery Timeline

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First Mineralized Drillhole on C10 Corridor
High Grade Perched Mineralization - Fox Lake East
First Intersection Within Deposit Footprint
High Grade-Thickness Mineralization - Fox Lake West
Maiden Resource Estimate


Exploration Delineation Resource Evaluation

Stepwise Moving Loop EM Conductors

High Grade-Thickness Mineralization - Fox Lake Central

*Deposit Outline at 0.1% U₃O₈ cut-off grade
Fox Lake Discovery Timeline

- First Mineralized Drillhole on C10 Corridor: 2007
- High Grade Perched Mineralization (Fox Lake East): 2008
- First Intersection Within Deposit Footprint: 2011
- High Grade-Thickness Mineralization (Fox Lake West): 2013
- High Grade-Thickness Mineralization (Fox Lake Central): 2014
- Maiden Resource Estimate: 2015

Fox Lake Deposit
Inferred 68.1 Mlbs $U_3O_8$ @ 7.99%
386,681 tonnes (0.7% $U_3O_8$ cut-off grade)

*Deposit Outline at 0.1% $U_3O_8$ cut-off grade

Stepwise Moving Loop EM Conductors

Geological Framework of the Fox Lake Deposit - Nov 28, 2017
Stepwise Moving Loop EM

Geological Framework of the Fox Lake Deposit

Legend

- Mineralization (0.1% \( \text{U}_3\text{O}_8 \) cut-off)

- Stepwise Moving Loop EM Conductors

- Fox Lake West

- Fox Lake Central

ZTEM IP 90Hz DT

0 75 150 300 450 m
Local Geology

Geological Framework of the Fox Lake Deposit

Legend

Lithology
- Pegmatite
- Calcpelite
- Pelite
- Graphitic Pelite
- Cordierite Pelite
- Garnet Pelite
- Semipelite
- Pelitic Metatexite
- Pelitic Diatexite

Structure
- Unidentified Altered Protolith
- Fault (defined)
- Fault (inferred)

Mineralization
(0.1% U₃O₈ cut-off)
Fox Lake Schematic Section

Unconformity @ ~700 m

Pyritization
Desilicification
Silicification
Bleaching

~550 m

MFb
MFa

Dravite Kaolinite
Uranium Mineralization
C10 Fault & Stratigraphy
Chlorite Dravite Clay
Chlorite

Garnet-bearing Pelite

Cordierite-bearing Pelite

*not to scale, for illustrative purposes only
Basement Structure

**Basement Structure Diagram**

- **MFB**
- **MFA**

*not to scale, for illustrative purposes only*

**Images**

- **Ductile Boudinage**
- **Semi-Brittle Fault**
- **Healed Breccia**
Sandstone Structure

Healed Breccia with Rotated Bedding

Desilicified Brittle Fault

Silicified Breccia

*not to scale, for illustrative purposes only
Fox Lake Central – Structural Geology

Legend

Lithology
- Pegmatite
- Calcpelite
- Pelite
- Graphitic Pelite
- Cordierite Pelite
- Garnet Pelite
- Semipelite
- Graphite Pelite
- Pelitic Metatexite
- Pelitic Diatexite

Structure
- Fault (defined)
- Fault (inferred)

Mineralization
- Unidentified Altered Protolith
- Granite Gneiss
- (0.1% U₃O₈ cut-off)
Distal Sandstone Alteration

Pervasive Bleaching
Disseminated Grey Pyrite
Interstitial Clay
Proximal Sandstone Alteration

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Proximal Sandstone Alteration

Fracture-Controlled Pyritization

Dravitzation and Silicification

Patchy Pyritization

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Basement Alteration

**Faulted graphitic pelite**

**Chloritization**

**Argillitization**

*not to scale, for illustrative purposes only*
Basement Alteration

*not to scale, for illustrative purposes only

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Exploration Pathfinders

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Uranium Partial
- >5.0 ppm
- 3.0-5.0 ppm
- 1.0-3.0 ppm
- 0.5-1.0 ppm

Reflectance Mineralogy
- ILLITE
- KAOLINITE
- DRAVITE
- CHLORITE
- DICKITE
West and Central zones show distinct spectral signatures
Geochemical Anomalism

- Arsenic distribution
Geochemical Anomalism

- Molybdenum distribution
Geochemical Anomalism

- Cobalt distribution
Geochemical Anomalous

- Nickel distribution
Fox Lake Mineralization

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Gouge-hosted

Fracture-hosted

Blebby/Redox

Perched mineralization

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Fox Lake Mineralization

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Semi-massive

Vuggy

Semi-massive with NiAs

Massive

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Grade Distribution

- Narrow target = drilling strategy required
- Multiple drill holes necessary to test ideal target

Stepwise Moving Loop Time- Domain EM Target

Reference Grade-Thickness Product (%m)
24.95% U₃O₈ / 8.0 m
Max 70.4% U₃O₈
Summary

- Discovery through delineation to maiden resource estimate in 5 years
- Exploration success resulting from early recognition of significant features, evaluation of deposit model
- Tight nature of high grade mineralization = challenging evaluation
- C10 corridor an extensive and fertile mineralizing system
  - Geochemical anomalism/reflectance mineralogical signature extends over 7 km
  - Potential for additional mineralization exists along the corridor
Questions

Thank You!