

Most Advanced Heavy Rare Earth Project

March 28, 2014

WE ARE A GENUINE RARE EARTH COMPANY



\$35 Million invested since 1997 Mining properties in Quebec/Ontario

Rare Earths

Kipawa JV Deposit with Toyota First NI 43-101 FS Filed Simple Metallurgy \$28 Million Invested

Gold

Near Major Gold Producers Partners to Fund NSR Potential \$7 Million Invested



WE ARE A VALUE INVESTMENT



Enriched in Heavies

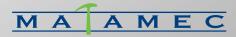
- FS Completed
- Pre-Development Stage
- Lowest Cost Project
- Toyota JV partner
- Focused on green technologies



HEAVIES USED FOR GREEN TECHNOLOGIES



- Soaring demand in technology heavy rare earths to be in short supply next 5 to 10 years
- China to restrict exports and begin importing heavy rare earths



GOVERNMENTS ARE NOW INVESTING



4 Challenges to Electrification of Transport





Materials

Rare Earths

Scarcity

Matamec





Energy



Infrastructure



KIPAWA - "IT'S ALL ABOUT THE GEOLOGY"

- Simple recovery process 1st open-pit deposit with reliable, known metallurgical process
- Excellent location Quebec skilled workforce, proximity to markets and infrastructure
- Toyota paid \$16 million searched over 400 projects worldwide and selected Kipawa
- Winner of Prestigious award "Quebec Entrepreneur of the Year" November, 2013

"The best source for a sustained quantity of HREEs is Matamec's HREE mineral-bearing deposit in Kipawa, Quebec."

> Dr. Anthony Mariano – Gold Report, August 2013



KIPAWA PROJECT: CLEAR PROCESS



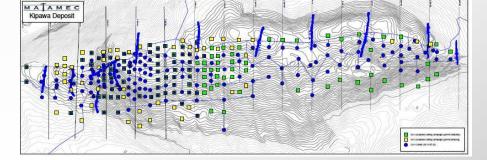
Eudialyte - Mosandrite Minerals: 90% RE contents

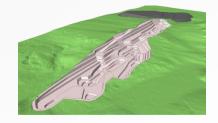


Mineral Reserves: 19.8MT @ 0.4105% TREO



Open Pit – Mine Life 15 Years







Process Plan: 3 Steps

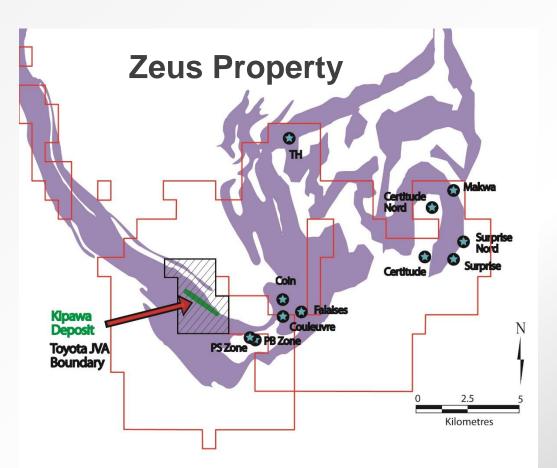


Heavy and Light rare earth concentrates





ZEUS PROPERTY – FUTURE GROWTH



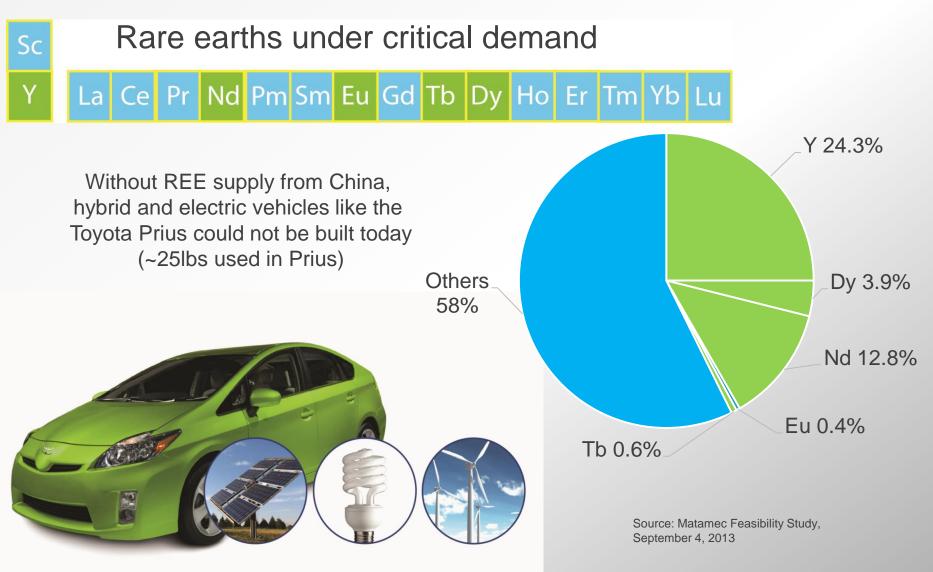
- Zeus: 22,172 hectares
- Kipawa: 1,298 hectares

Many showings and drilling to discover much more!

Zeus Property boundaryToyota JVA boundary

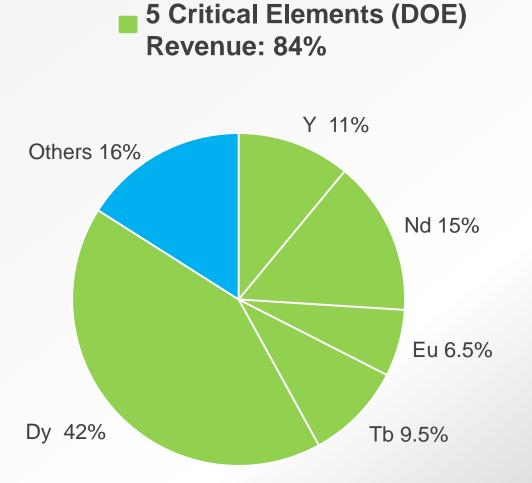


KIPAWA DEPOSIT – RICH IN <u>HEAVIES</u>





POTENTIAL AT KIPAWA



| Strong Economics | Base Case (million CAD) |
|--------------------------------------|----------------------------------|
| CAPEX | 374 |
| Revenue (15 years) | 2,548 |
| OPEX (annual) | 78.5 |
| Before-tax Cash Flow | 1,680 |
| Before-tax NPV @ 10% (pre-tax) | 260 |
| Before-tax IRR (%) | 21.6 |
| Before-tax Payback Period (years) | 3.9 |

Source: Matamec Feasibility Study Forecasted Prices 2020, Sept 4, 2013



A LOOK AT THE REO PRICING

| Rare Earth Oxide | FS Price Forecast 2016 | REO Price Ex-Works Mine-Site (US\$/kg REO) | Asian Metal FOB China, \$USD/kg REO March 13 th , 2014 | Asian Metal 2011 Peak Price (FOB China, \$US/kg REO) |
|---|------------------------------|---|--|---|
| Cerium (Ce ₂ O ₃) | \$5.90 | \$4.13 | \$5.50 | \$151.00 |
| Lanthanum (La ₂ O ₃) | \$5.95 | \$4.17 | \$5.90 | \$140.00 |
| Neodymium (Nd ₂ O ₃) | \$75.00 | \$52.50 | \$70.00 | \$370.00 |
| Praseodymium (Pr ₆ O ₁₁) | \$75.40 | \$52.78 | \$126.00 | \$251.00 |
| Samarium (Sm ₂ O ₃) | \$6.85 | \$4.80 | \$11.00 | \$136.00 |
| Europium (Eu ₂ O ₃) | \$1,100.00 | \$770.00 | \$950.00 | \$5,600.00 |
| Gadolinium (Gd ₂ O ₃) | \$59.40 | \$41.58 | \$49.00 | \$186.00 |
| Terbium (Tb ₄ O ₇) | \$1,076.00 | \$753.20 | \$850.00 | \$4,200.00 |
| Dysprosium (Dy ₂ O ₃) | \$713.00 | \$499.10 | \$490.00 | \$2,500.00 |
| Yttrium (Y ₂ O ₃) | \$29.40 | \$20.58 | \$20.00 | \$200.00 |
| Holmium (Ho ₂ O ₃) | \$53.60 | \$32.16 | **\$69.00 | **\$711.00 |
| Erbium (Er ₂ O ₃) | \$63.60 | \$38.16 | **\$73.00 | \$300.00 |
| Thulium (Tm ₂ O ₃)* | \$1,200.00 | \$720.00 | n/a | n/a |
| Ytterbium (Yb ₂ O ₃)* | \$56.70 | \$34.02 | **\$52.00 | **\$142.00 |
| Lutetium (Lu ₂ O ₃) | \$1,400.00 | \$840.00 | **\$1,359.00 | **\$1,357.00 |

*At PEA, no values were attributed to Tm and Yb due to prices were available at date of publication. **Prices shown represent Chinese Domestic RE Prices – rounded to the nearest dollar.

UPCOMING MILESTONES

UPSIDE OPPORTUNITIES & OPTIMIZATION

Additional Upside Opportunities:

- **Mining:** Room for pit design improvement at detailed engineering
- Metallurgy:
 - Optimization testwork and 2nd pilot plant to improve recoveries and reduce reagent consumption which leads to lower processing costs
 - Investigating the separation of individual REOs for a separation facility that produces high-purity products
- Production Scale: Potential optimization concerning production rate scenarios in order to maximize the IRR on the project

Expansion:

- Resources: Verification of lateral and down dip extension by drilling
- By-Products: Testwork to recover zirconium and other by-products (minor metals) in the REE mineralized zones and in the syenite body

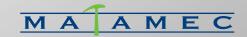


KIPAWA PILOT PLANT ON INDUSTRIAL SCALE



Beneficiation Stage – Phase 1 of 3 Oct. 2013





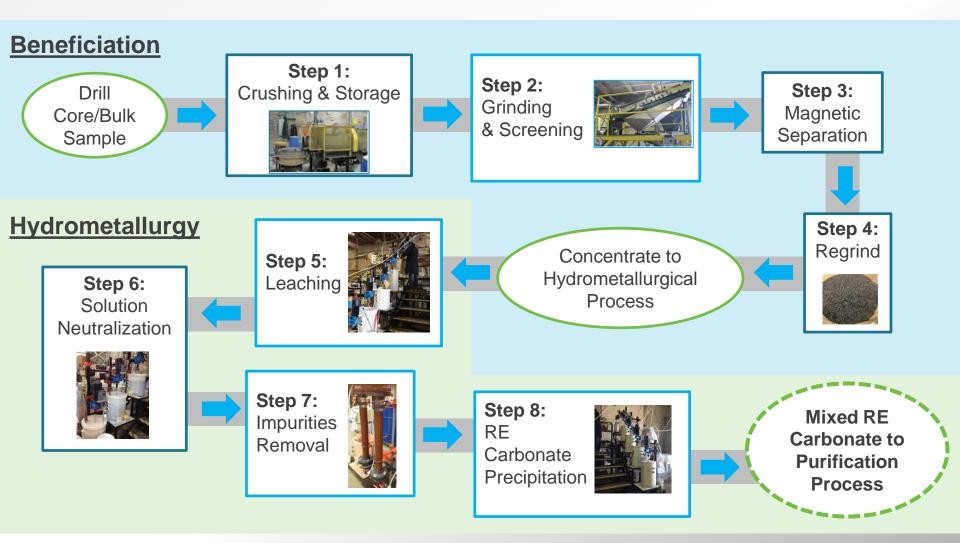
2ND MINI PILOT PLANT- HYDROMET - 2014



Concentrate of Mixed RE



OUR ADVANCED METALLURGICAL PROCESS





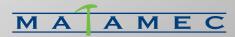
AN ATTRACTIVE OPPORTUNITY

Companies with HREE deposits > 20% and have completed PEA or FS

| | Stock Price March 13, 2014 (\$CAN) | O/S (M) | Market Cap (\$M CAN) | Stage | Mineral Reserves (Mt) | JVA End-User Signed | Annual Target Production Rate (Tonnes REO) | HREO (as %TREO) | Basket Price* (\$USD) |
|---------------------|---|------------|----------------------------|-------|-----------------------------|---------------------------|---|-----------------------|-----------------------------|
| Matamec | \$0.09 | 120.3 | 10.83 | FS | 19.77 Open Pit | Toyota | 3,653 | 38.46% | \$61.50 |
| Avalon Rare Metals | \$0.74 | 110.5 | 81.75 | FS | 14.60 Underground | - | 10,000 | 28.78% | \$60.06 |
| Alkane Resources | \$0.36 | 372.5 | 133.62 | FS | 73.20*** Open Pit | - | 4,170 | 23.32% | \$41.73** |
| Quest Rare Minerals | \$0.56 | 67.6 | 37.83 | PFS | - | - | 13,600 | 43.10% | \$63.75 |
| Tasman Metals | \$1.78 | 64.8 | 115.39 | PEA | - | - | 6,800 | 53.60% | \$65.05 |
| Ucore Rare Metals | \$0.37 | 175.3 | 64.87 | PEA | - | - | 2,250 | 41.44% | \$63.16 |

*Based on current prices found in Metal Pages (March 13th, 2014); Tm and Yb pricing were estimated by Matamec. The Basket Price provided are from Matamec's estimates derived from the available public documents and may not reflect the most recently released public information. **Based on Matamec estimate of Er, Yb, Ho, Tm and Lu distribution in the deposit.

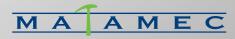
***http://www.alkane.com.au/index.php/projects/current-projects/dubbo



NEXT STEPS TO DEVELOPMENT

| Rare Earths | | | | |
|--|-------------------|--|--|--|
| Looking for financial investors to partner in bringing the Kipawa JV project to the development stage. | | | | |
| Investment required: CDN\$8 million (\$4 million in progress) | | | | |
| PRE- STAC | DEVELOPMENT Ge | Completion of second mini pilot plant - \$3 million Environmental studies - \$3 million Marketing and administration - \$2 million | | |

| C | Gold | |
|---|---------|--|
| | PHASE 1 | 1. Spinoff as a new entity - \$2 million |



UPSIDE POTENTIAL IN GOLD



Gold Properties:

- Near major producers
- Partners to fund
- **NSR** potential
- \$7 million invested

Spinoff in progress



MATAMEC AT A GLANCE

| Company Statistics – (as of March 13, 2014) | |
|---|-----------------------------------|
| Current Share Price | \$0.09 CAN \$0.08 US |
| 52 Week Range | \$0.07-0.26 CAN \$0.07-0.24 US |
| Shares Outstanding | 120,300,186 |
| Market Capitalization | \$10.83M CAN \$9.62M US |
| Working Capital (at Sept 30, 2013) | \$2.78M CAN (unaudited) |
| Current Burn Rate | \$120K / Mth |
| Stock Options | 9M |



MATAMEC – VALIDATION OF EXCELLENCE

- ✓ Completed and filed first NI 43-101 Feasibility Study
- ✓ First RE Company to have an End-User Toyota
- Quebec Government investing in electrification of transport
- Technology applications to increase shortages of heavies
- ✓ Kipawa "Its all about the Geology"
- And upside potential in Gold Properties



CONCLUSION

TO BECOME THE NEXT GLOBAL HEAVY RARE EARTH PRODUCER

- Focused on green energy applications – hybrid and electric vehicles
- Positioned to be the 1st mover in production
- Quebec Electrification of Transport to push growth of Matamec



CAUTION CONCERNING FORWARD-LOOKING STATEMENTS

This presentation contains "forward-looking information" within the meaning of Canadian Securities legislation. Generally, forward-looking statements can be identified by the use of forward-looking terminology such as "scheduled", "anticipates", "expects" or "does not expect", "is expected", "scheduled", "targeted", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forwardlooking statements contained herein include, without limitation, statements relating to mineral reserve estimates, mineral resource estimates, realization of mineral reserve and resource estimates, capital and operating costs estimates, the timing and amount of future production, costs of production, success of mining operations, the ranking of the project in terms of cash cost and production, permitting, economic return estimates, power and storage facilities, life of mine, social, community and environmental impacts, rare metal markets and sales prices, off-take agreements and purchasers for the Company's products, environmental assessment and permitting, securing sufficient financing on acceptable terms, opportunities for short and long term optimization of the Project, and continued positive discussions and relationships with local communities and stakeholders. Forward-looking statements are based on assumptions management believes to be reasonable at the time such statements are made. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Although Matamec has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to: Matamec's ability to secure sufficient financing to advance and complete the Project, uncertainties associated with Matamec's resource and reserve estimates, uncertainties regarding global supply and demand for rare earth materials and market and sales prices, uncertainties associated with securing off-take agreements and customer contracts, uncertainties with respect to social, community and environmental impacts, uncertainties with respect to optimization opportunities for the Project, as well as those risk factors set out in the Company's year-end Management Discussion and Analysis dated December 31, 2012 and other disclosure documents available under the Company's profile at www.sedar.com. Forward-looking statements contained herein are made as of the date of this presentation and Matamec 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.





Andre Gauthier, President & CEO

Tel(514) 844 5252Emailinfo@matamec.comWebsitewww.matamec.com

Edward Miller, Director, IR

Tel(514) 844 5252 x 205Emailedward.miller@matamec.comWebsitewww.matamec.com

