

M A  A M E C

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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”. Forward-looking 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.

MATAMEC AT A GLANCE

Matamec
Founded in 1997
Headquartered in Montreal
Mining properties in Quebec/Ontario
\$35 Million Invested



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

MATAMEC GOLD – UPSIDE POTENTIAL



Gold Properties:

- Near major producers
- Partners to fund
- NSR potential

MATAMEC RARE EARTHS

Do you **believe** these **technology** applications will **increase**?



- **Soaring demand** in technology - HRE to be in short supply next 5 to 10 years
- **China** to increasingly restrict exports for domestic industry
- **China** to import HREEs for domestic industry

Today.....Governments are believing in HRE in the USA, Canada and Quebec

QUEBEC STRATEGY – 2011 - 2020

ELECTRIFICATION OF VEHICLES

KPMG Study on Electrification of Transport in Quebec

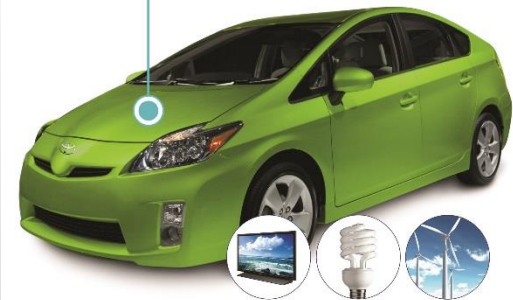
- Creation of \$107 - \$232M in 2020
- 1,800 - 2,600 jobs in Quebec alone
- Fuel savings of 181 - 384M liters
- \$63 - \$134 million in pollution costs
- Reduction of 415,000 - 876,000 tons of CO₂



Heavy Rare Earths Essential for Hybrid & Electric Vehicles

66 Dysprosium	65 Terbium	60 Neodymium	59 Praseodymium
Dy	Tb	Nd	Pr

Magnets



Toyota Prius
~25lbs of rare earths

KIPAWA - “IT’S ALL ABOUT THE GEOLOGY”

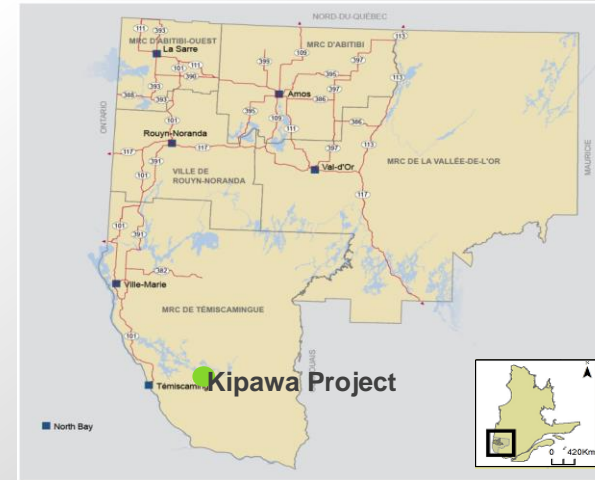
Simple recovery process – 1st open-pit deposit with reliable, known metallurgical process

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 PILOT PLANT ON INDUSTRIAL SCALE



Beneficiation Stage – Phase 1 of 3
Oct. 2013

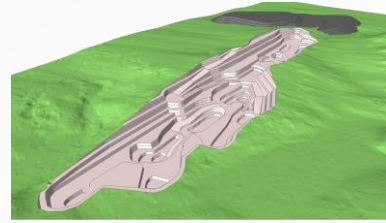
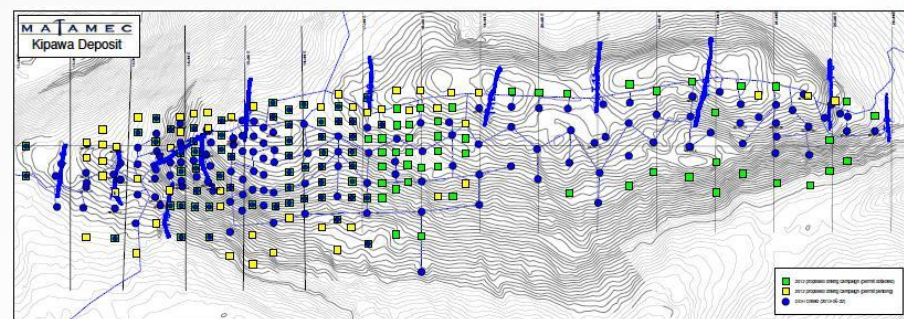


KIPAWA PROJECT: CLEAR PROCESS



1 Eudialyte - Mosandrite Minerals: 90% RE contents

2 Mineral Reserves:
19.8MT @
0.4105% TREO



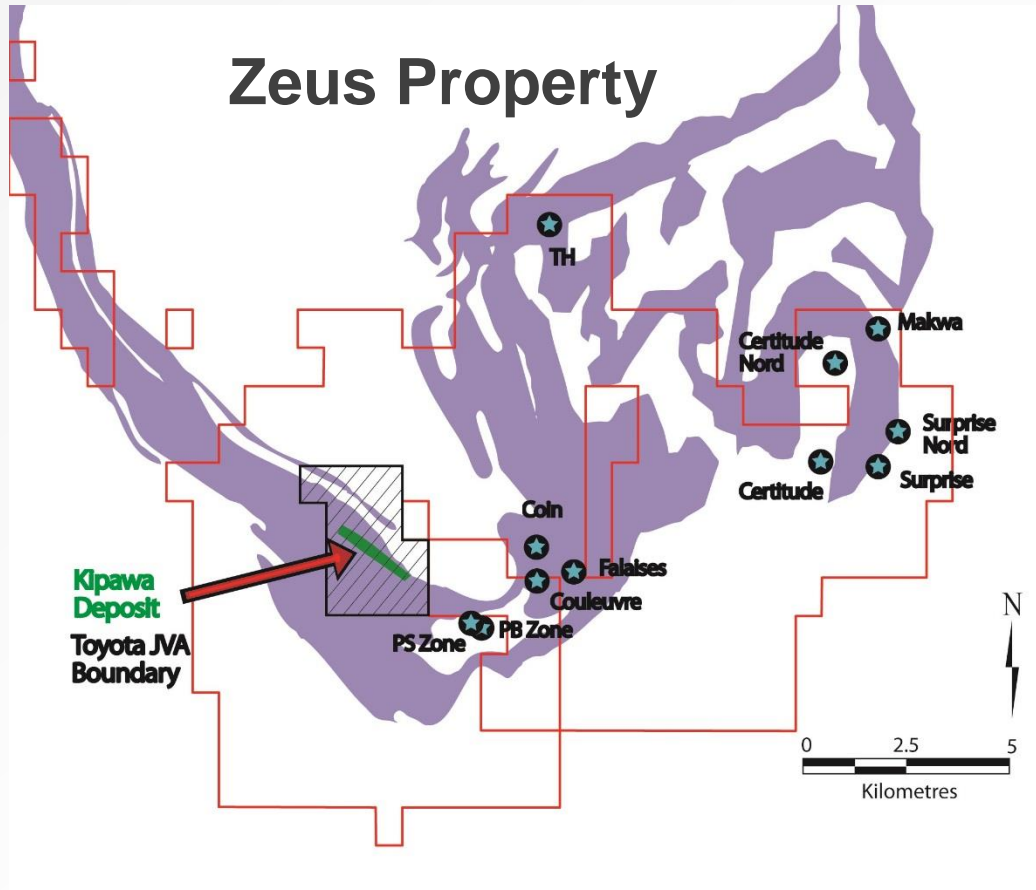
3 Open Pit – Mine Life
15 Years

5 Heavy and Light rare earth concentrates

4 Process Plan:
2 Steps



ZEUS PROPERTY – FUTURE GROWTH



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

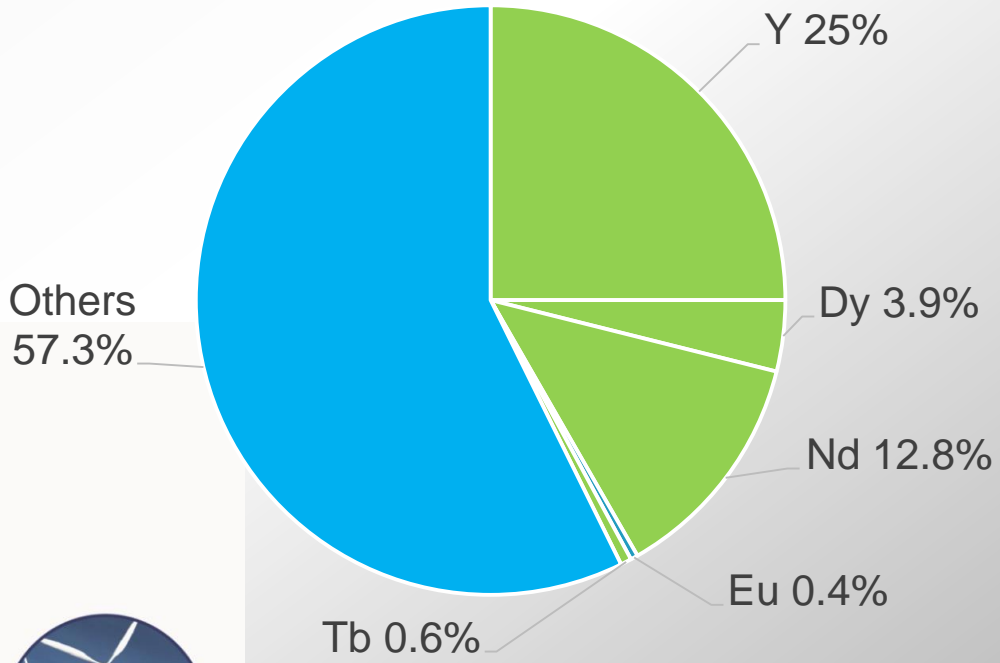
Many showings and drilling to discover much more!

- Zeus Property boundary
- Toyota JVA boundary

KIPAWA DEPOSIT – RICH IN HEAVIES

Sc	Rare earths under critical demand														
Y	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu

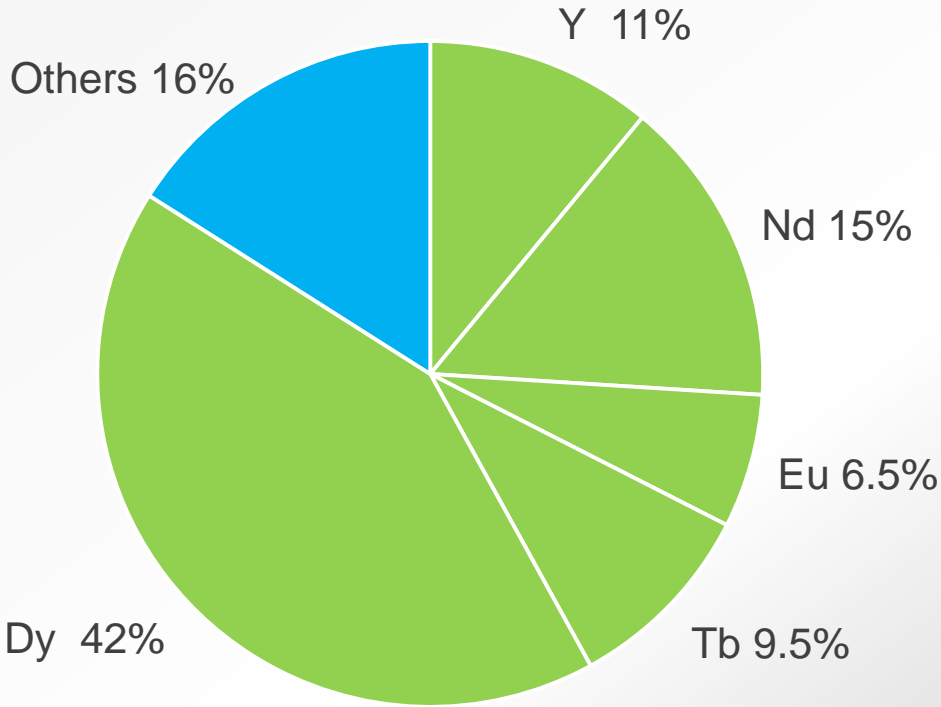
Without REE supply from China, hybrid and electric vehicles like the Toyota Prius could not be built today (~25lbs used in Prius)



Source: Matamec Feasibility Study, September 4, 2013

POTENTIAL AT KIPAWA

■ **5 Critical Elements (DOE)**
Revenue: 84%



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 – ⁽¹⁾
 Forecasted Prices 2020, Sept 4, 2013

A LOOK AT THE REO PRICING

Rare Earth Oxide	FS Price Forecast For 2016	Asian Metal FOB China, \$USD/kg REO Feb. 26 th , 2014	Asian Metal 2011 Peak Price (FOB China, \$US/kg REO)
Cerium (Ce ₂ O ₃)	\$5.90	\$5.50	\$151.00
Lanthanum (La ₂ O ₃)	\$5.95	\$5.90	\$140.00
Neodymium (Nd ₂ O ₃)	\$75.00	\$70.00	\$370.00
Praseodymium (Pr ₆ O ₁₁)	\$75.40	\$120.00	\$251.00
Samarium (Sm ₂ O ₃)	\$6.85	\$11.00	\$136.00
Europium (Eu ₂ O ₃)	\$1,100.00	\$980.00	\$5,600.00
Gadolinium (Gd ₂ O ₃)	\$59.40	\$49.00	\$186.00
Terbium (Tb ₄ O ₇)	\$1,076.00	\$850.00	\$4,200.00
Dysprosium (Dy ₂ O ₃)	\$713.00	\$490.00	\$2,500.00
Yttrium (Y ₂ O ₃)	\$29.40	\$23.00	\$200.00
Holmium (Ho ₂ O ₃)	\$53.60	**\$69.00	***\$711.00
Erbium (Er ₂ O ₃)	\$63.60	**\$73.00	\$300.00
Thulium (Tm ₂ O ₃)*	\$1,200.00	n/a	n/a
Ytterbium (Yb ₂ O ₃)*	\$56.70	**\$52.00	***\$142.00
Lutetium (Lu ₂ O ₃)	\$1,400.00	**\$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. ** From Asian Metal January 7th, 2014. Prices shown represent Chinese Domestic RE Prices. ***Chinese Domestic price listed – 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 testwork to separate to individual REO's for a high-purity separation facility
- **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

2ND MINI PILOT PLANT– HYDROMET - 2014

1st Pilot Plant in July 2012



Concentrate of
Mixed RE

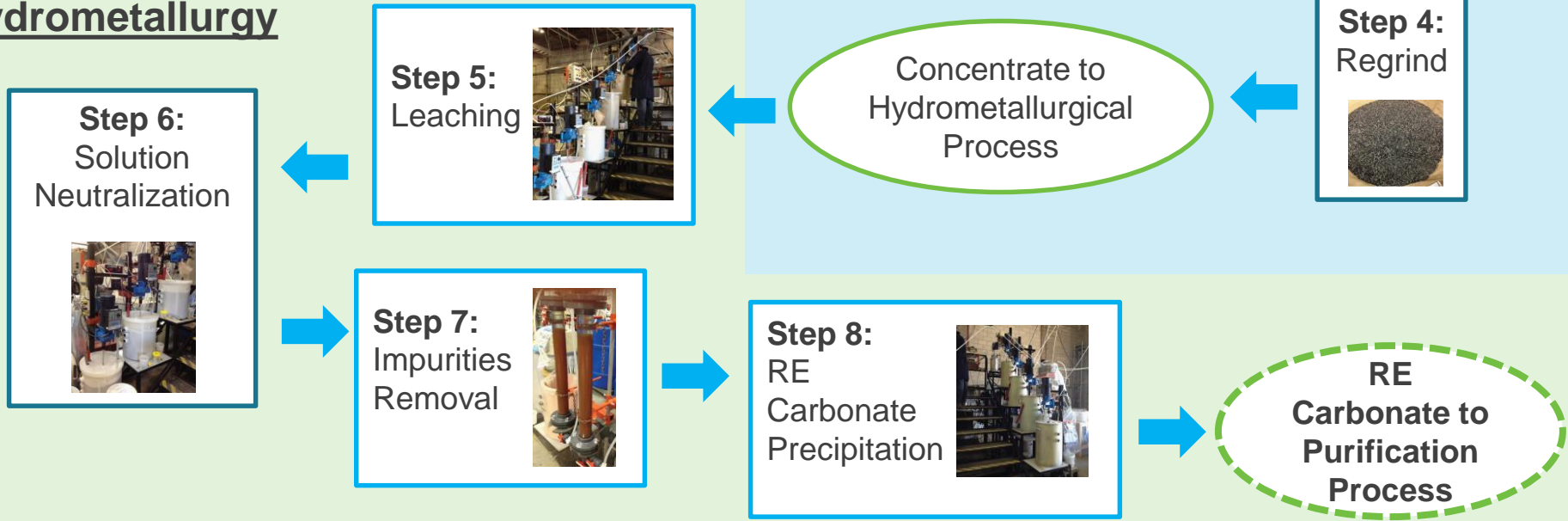


OUR METALLURGICAL PROCESS

Beneficiation



Hydrometallurgy



PROVINCIAL PROCESS



- BAPE process (rare earths and more than 2,000 t/d)
 - Project notice will be sent to the Minister describing the general nature of project in winter 2014
 - Preparation of the study with the environmental impact study
 - Public audiences and issuance of certificate of authorization
- MDDEFP requires extensive data, including:
 - Detailed description of the project with plans and quotes
 - Baseline study (environmental and social aspects)
 - As per Directive 019

FEDERAL PROCESS

CANADIAN ENVIRONMENTAL ASSESSMENT ACT



- ✓ January 31, 2013 - Project notice submitted to the CEAA
- ✓ March 28, 2013 – CEAA confirmed that an Environmental Impact Assessment (EIA) is required on Kipawa project
- ✓ May 31, 2013 - guidelines for EIA were provided by the CEAA
- ✓ June 3, 2013 CEAA press release detailing grants for environmental organizations
 - Agency requires one year to complete analysis of EIA
 - Through the Public Consultation Process consists of 4 stages:
2 are completed, 2 are still to come



MATAMEC: AN ATTRACTIVE OPPORTUNITY

Companies with HREE deposits > 20% and have completed PEA

	Stock Price Feb. 26, 2014 (\$CAN)	Shares Outstanding (M)	Market Cap (\$M CAN)	Mineral Reserves (Mt)	JVA End- User Signed	Annual Target Production Rate (Tonnes REO)	HREO (as %TREO)	Basket Price* (\$USD)
Matamec Explorations	\$0.10	120.3	12.03	19.77 Open Pit	Toyota	3,653	38.46%	\$62.14
Avalon Rare Metals	\$0.68	110.5	65.10	14.60 Underground	-	10,000	28.78%	\$60.44
Alkane Resources	\$0.395	372.5	147.03	-	-	4,170	23.32%	\$41.98**
Quest Rare Minerals	\$0.53	67.2	35.64	-	-	13,600	43.10%	\$64.48
Tasman Metals	\$1.24	64.8	80.38	-	-	6,800	53.60%	\$66.03
Ucore Rare Metals	\$0.385	173.8	66.92	-	-	2,250	41.44%	\$63.87

*Based on current prices found in Asian Metals (February 26, 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.

A STRATEGIC INVESTMENT!

Matamec is looking for a strategic financial investor(s) to partner in bringing the Kipawa project to the development stage. This investor will be joining Toyota and another strategic investor to be announced in 2014.

Investment required for phase 1: CDN\$6 million

Investment required for phase 2: CDN\$19 million

PHASE 1	<ol style="list-style-type: none">1. Completion of second mini pilot plant - \$3 million2. Environmental Studies - \$3 million
PHASE 2	<ol style="list-style-type: none">1. Development of a separation process plant - \$17 million2. Marketing and administration - \$2 million

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



MATAMEC AT A GLANCE

Company Statistics – (as of February 27, 2014)

Current Share Price	\$0.10 CAN \$0.09 US
52 week range	\$0.07-0.26 CAN \$0.07-0.24 US
Shares Outstanding	120,300,186
Market Capitalization	\$12.63M CAN \$10.23M US
Working Capital <small>(at Sept 30, 2013)</small>	\$2.78M CAN <small>(unaudited)</small>
Current Burn Rate	\$120K / Mth
Stock Options	9M

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 North America in production
- Quebec Electrification of Transport to push growth of Matamec



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