



AVALON VENTURES LTD.

AVL:TSXV

**MINERALS & METALS FOR
ALTERNATIVE ENERGY AND A
CLEANER ENVIRONMENT**



For further information contact: AVL@agoracom.com
or Don Bubar, P.Ge., President Tel: (416) 364-4938

www.avalonventures.com

3 Li Lithium	3 Li Lithium
4 Be Beryllium	4 Be Beryllium
31 Ga Gallium	31 Ga Gallium
32 Ge Germanium	32 Ge Germanium
37 Rb Rubidium	37 Rb Rubidium
39 Y Yttrium	39 Y Yttrium
64 Gd Gadolinium	64 Gd Gadolinium
49 In Indium	49 In Indium
55 Cs Cesium	55 Cs Cesium
73 Ta Tantalum	73 Ta Tantalum
58 Ce Cesium	58 Ce Cesium
60 Nd Neodymium	60 Nd Neodymium
63 Eu Europium	63 Eu Europium

The Next Big Thing: *Rare Metals*

September 20, 2007



AVALON'S RARE METALS FOCUS: *Leveraged to advances in high-technology and clean energy generation*

- **Materials science is increasingly exploiting the unique properties of rare metals**
 - Creating new materials and products which are smaller, lighter, stronger, faster
 - Alternative energy: battery power, fuel cells
 - Energy conservation and a cleaner environment: Hybrid and electric cars
- **Rare Earth Elements, Lithium, Beryllium, Gallium, Indium, Germanium, Tantalum, Tin**



What are the Rare Earth Elements?

Periodic Table of the Elements

<div style="border: 2px solid blue; padding: 10px; display: inline-block;"> <p style="color: blue; font-size: 1.2em;">Other rare metals</p> </div>																																													
1 H 1.00794 0.071																	5 B 10.811 2,34	6 C 12.0107 2,26	7 N 14.0067 0,81	8 O 15.9994 1,14																									
3 Li 6.941 0,53	4 Be 9.01218 1,85																	13 Al 26.9815 2,70	14 Si 28.0855 2,93	15 P 30.9738 1,82 (w)	16 S 32.066 2,07																								
11 Na 22.9897 0,97	12 Mg 24.3050 1,74	21 Sc 44.9559 3,0	22 Ti 47.867 4,51	23 V 50.9415 6,1	24 Cr 51.9961 7,19	25 Mn 54.938 7,43	26 Fe 55.845 7,86	27 Co 58.9332 8,9	28 Ni 58.6934 8,9	29 Cu 63.546 8,96	30 Zn 65.39 7,14	31 Ga 69.723 5,91	32 Ge 72.61 5,32	33 As 74.9216 5,72	34 Se 78.96 4,79	37 Rb 85.4678 1,53	38 Sr 87.62 2,6	39 Y 88.9059 4,47	40 Zr 91.224 6,49	41 Nb 92.9064 8,4	42 Mo 95.94 10,2	43 Tc [97.9072 11,5	44 Ru 101.07 12,2	45 Rh 102.905 12,4	46 Pd 106.42 12,0	47 Ag 107.868 10,5	48 Cd 112.411 8,65	49 In 114.818 7,31	50 Sn 118.710 7,30	51 Sb 121.760 6,62	52 Te 127.60 6,24														
19 K 39.0983 0,86	20 Ca 40.078 1,55	39 La 138.906 6,17	72 Hf 178.49 13,1	73 Ta 180.948 16,6	74 W 183.84 19,3	75 Re 186.207 21,0	76 Os 190.23 22,6	77 Ir 192.217 22,5	78 Pt 195.078 21,4	79 Au 196.967 19,3	80 Hg 200.59 13,6	81 Tl 204.383 11,85	82 Pb 207.2 11,4	83 Bi 208.98 9,8	84 Po [208.982 [9,2]	55 Cs 132.905 1,90	56 Ba 137.327 3,5	57 Ac [227.027 --	104 Rf [261.108 --	105 Db [262.114 --	106 Sg [266.121 --	107 Bh [264.124 --	108 Hs [269.134 --	109 Mt [268.138 --	110 Uun [271.146 --	111 Uuu [272.153 --	112 Uub [277 --	113 Uut [288 --	114 Uuq [289 --	115 Uuh [289 --															
<table border="1"> <tr> <td>58 Ce 140.116 6,67</td> <td>59 Pr 140.908 6,77</td> <td>60 Nd 144.24 7,00</td> <td>61 Pm [144.912 --</td> <td>62 Sm 150.36 7,54</td> <td>63 Eu 151.964 5,26</td> <td>64 Gd 157.25 7,89</td> <td>65 Tb 158.925 8,27</td> <td>66 Dy 162.5 8,54</td> <td>67 Ho 164.93 8,80</td> <td>68 Er 167.26 9,05</td> <td>69 Tm 168.934 9,33</td> <td>70 Yb 173.04 6,98</td> <td>71 Lu 174.967 9,84</td> </tr> <tr> <td>90 Th 232.038 11,7</td> <td>91 Pa 231.036 15,4</td> <td>92 U 238.029 19,07</td> <td>93 Np [237.048 19,5</td> <td>94 Pu [244.064 --</td> <td>95 Am [243.061 11,7</td> <td>96 Cm [247.070 --</td> <td>97 Bk [247.070 --</td> <td>98 Cf [251.079 --</td> <td>99 Es [252.083 --</td> <td>100 Fm [257.095 --</td> <td>101 Md [258.098 --</td> <td>102 No [259.100 --</td> <td>103 Lr [262.109 --</td> </tr> </table>																		58 Ce 140.116 6,67	59 Pr 140.908 6,77	60 Nd 144.24 7,00	61 Pm [144.912 --	62 Sm 150.36 7,54	63 Eu 151.964 5,26	64 Gd 157.25 7,89	65 Tb 158.925 8,27	66 Dy 162.5 8,54	67 Ho 164.93 8,80	68 Er 167.26 9,05	69 Tm 168.934 9,33	70 Yb 173.04 6,98	71 Lu 174.967 9,84	90 Th 232.038 11,7	91 Pa 231.036 15,4	92 U 238.029 19,07	93 Np [237.048 19,5	94 Pu [244.064 --	95 Am [243.061 11,7	96 Cm [247.070 --	97 Bk [247.070 --	98 Cf [251.079 --	99 Es [252.083 --	100 Fm [257.095 --	101 Md [258.098 --	102 No [259.100 --	103 Lr [262.109 --
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Li Solid	Cs Liquid	Ar Gas	No Synthetic																																										
Alkali metals	Alkali earth metals	Transition metals	Rare earth metals																																										
Other metals	Noble Gases	Halogens	Other nonmetals																																										

- Light REE's:
 La= Lanthanum
 Ce= Cerium
 Pr=
 Praseodymium
 Nd=Neodymium
 Sm= Samarium
- Heavy REE's:
 Eu= Europium
 Gd= Gadolinium
 Tb=Terbium
 Dy= Dysprosium
 Ho= Holmium
 Er= Erbium
 Tm= Thulium
 Yb= Ytterbium
 Lu= Lutetium
 Y= Yttrium

Rare Earth Elements

Heavy Rare Earths



Solar Energy Panels



- New technology:
Carbon – Indium –
Gallium – Selenide
(CIGS) thin film
 - significantly less
costly to
manufacture than
traditional Silicon
-based panels.



Flat Screens



- REE's: Yttrium, Terbium and Europium used to make the colour phosphors in flat screens
- Rapidly growing demand
- Indium-tin oxide a small but critical component to glass surface



Light Bulbs



- New policy in Australia California and now Canada to phase-out traditional incandescent bulbs
- Light Emitting Diodes (LEDs) using indium gallium, yttrium are more energy-efficient, and longer lasting
- Better alternative to CFL's: quality of light lack of mercury



Rechargeable Batteries



- **Lithium Ion becoming the Industry leader due to superior performance characteristics**
- **Rapidly growing use in the portable electronic devices and power tools**
- **Lithium ion replacing NiMH as rechargeable battery of choice for Hybrid vehicles**
- **Forecast AA growth 10 – 15% over the next 5- 6 years**



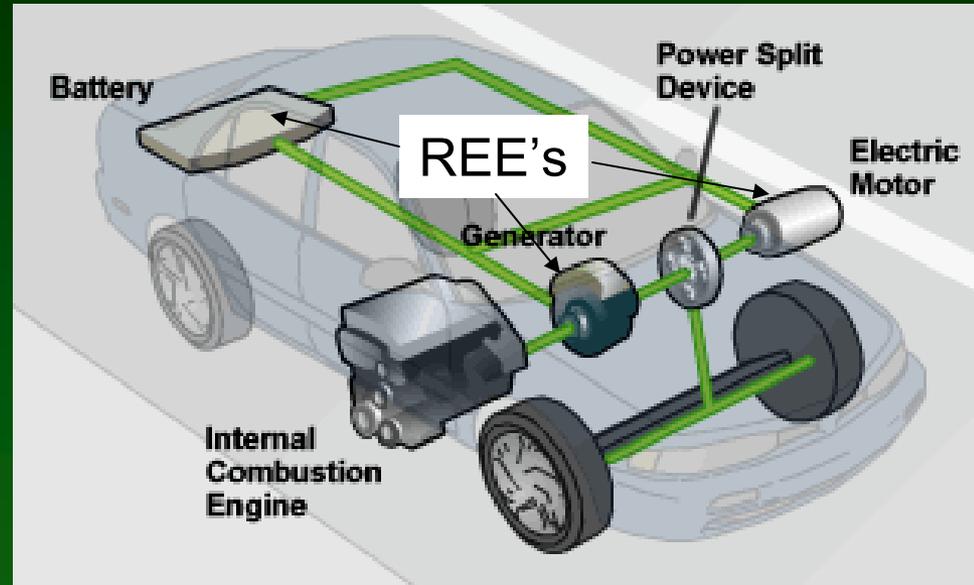


HYBRID CARS: MAJOR CONSUMERS OF RARE EARTH ELEMENTS



**Toyota Prius
65 lbs of REE's**

Rare Earth Element (“REE”) super magnets used in electric motors are key to hybrid car technology

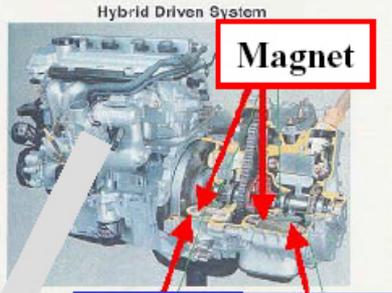
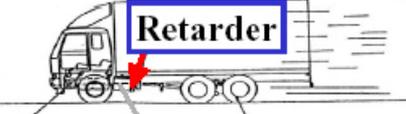
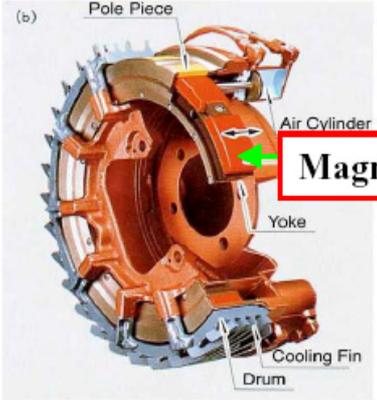


“With growing demand from the automotive sector, Rare Earths will be a \$2 billion global business by 2011”



Increasing numbers of REE Magnets per vehicle with increasing use of small electric motors throughout

Applications for Automobile

Traction Motor and Generator for HEV	Motor for EPS	Retarder
  <div style="display: flex; justify-content: space-around;"> Generator Traction Motor </div>	 	 <div style="display: flex; justify-content: space-around;"> Engine Brake Exhaust Brake Foot Brake </div> 
<p>N-35VH, 38AH etc</p>	<p>N-39SH, 44H etc</p>	<p>N-32H, 48H etc</p>



Exponential sales growth for HEV's ("Hybrid electric vehicles") led by Toyota

Toyota's global HEV Sales recently reached 1 million units. Forecast to grow to 1 million per year by 2011.

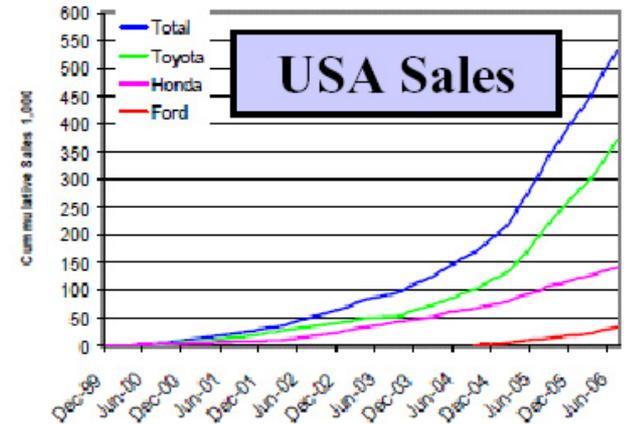
Penetrating HEV in USA



Toyota Camry HEV 2007



**GM Chevrolet Tahoe HEV 2007
(2-mode strong HEV)**

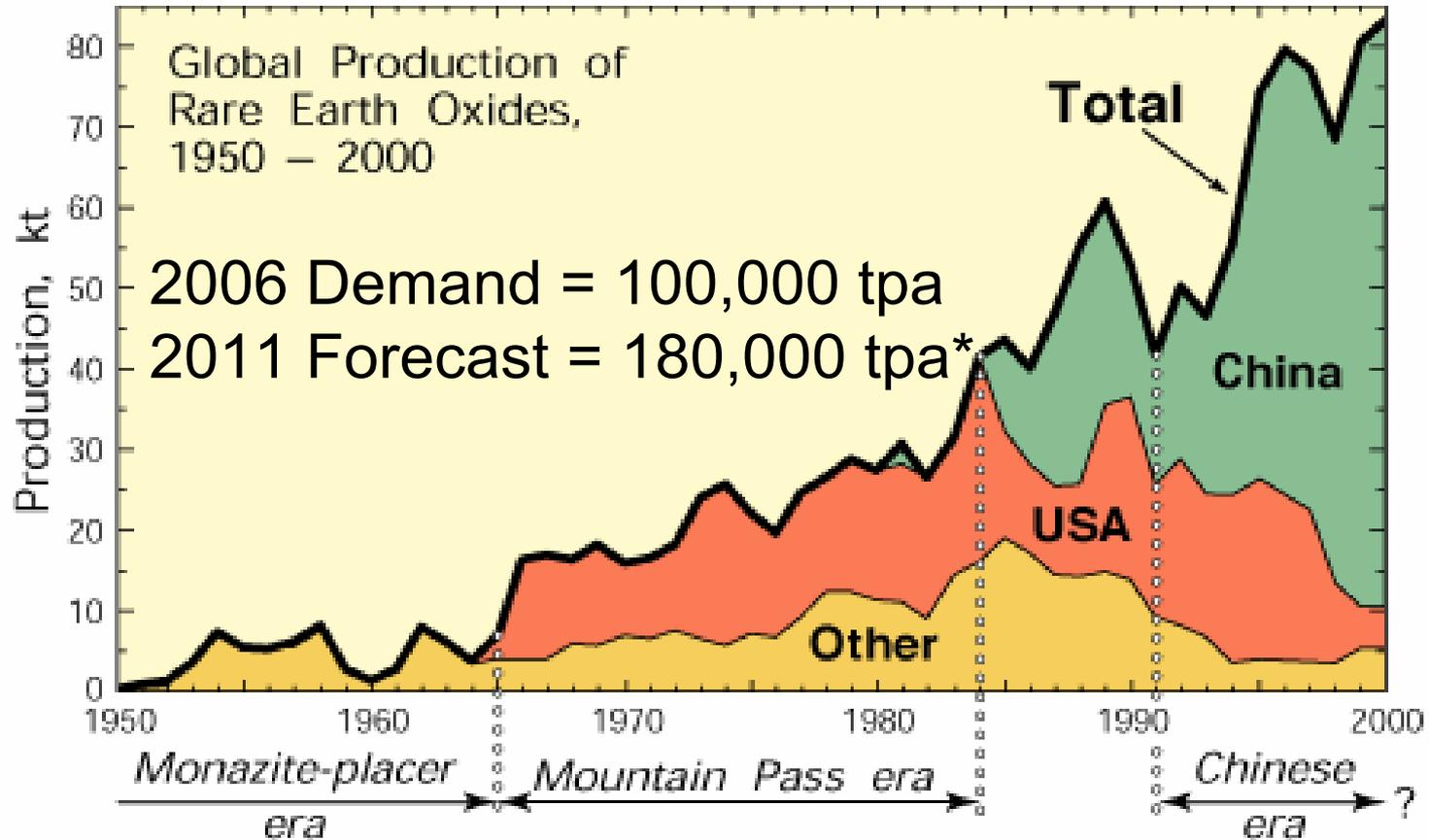


Ford Escape HEV 2007



Global Production of Rare Earths

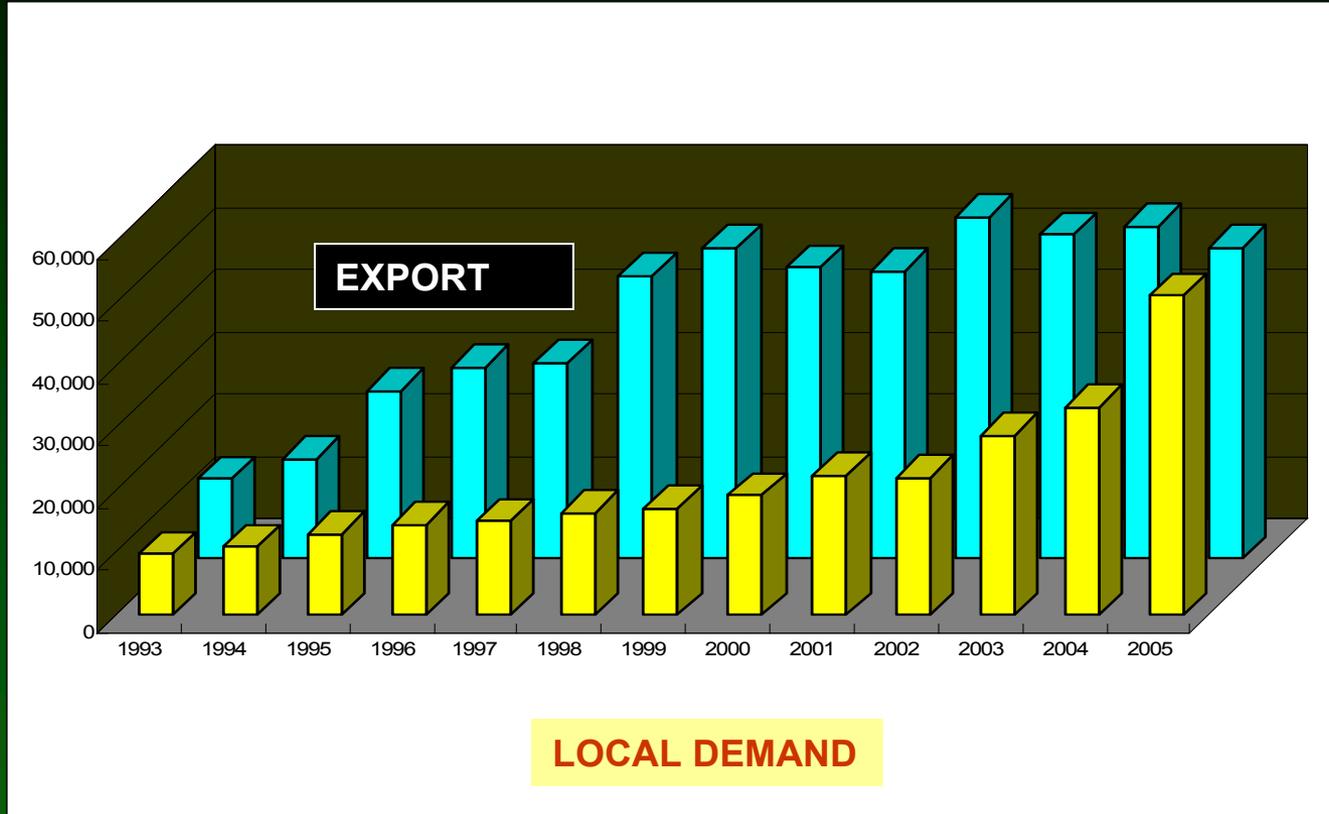
Over 95% of global supply now comes from China



* Source: D. Kingsnorth, (Roskill) MM Presentation Hong Kong, 2007,



CHINESE EXPORT & LOCAL DEMAND



Chinese REE Exports and local demand are now essentially in balance and likely to move in to deficit.



REE Demand by Application (Tonnes oxide)

(Source: BCC Research, 2006)

Applications shown in bold white are mainly automotive

Application	2005	2010	%AAG
Magnets	17,150	31,100	12.6%
NiMH Batteries	7,200	27,300	30.5
Catalysts	21,230	25,960	3.8
Polishing	15,150	23,500	9.2
Glass Additives	13,590	13,990	0.6
Phosphors	4,007	7,512	13.0
Other	16,935	24,950	8.0
TOTAL	95,262	154,312	10.1%



REE Demand by Element

(Tonnes oxide, Source: BCC Research, 2006)

REE's shown in white are used primarily in magnets

Rare Earth Element	2005	2010	%AAG
Cerium	37,736	53,272	7.1%
Lanthanum	28,041	47,197	11.0
Neodymium	15,915	28,331	12.2
Praseodymium	5,705	11,972	16.0
Dysprosium	1,715	3,110	12.6
Terbium	259	547	16.1
Other	5,891	9,883	10.9
TOTAL	95,262	154,312	10.1%



RARE EARTH ELEMENT PRICES

Source: Metal-Pages.com August 23 07

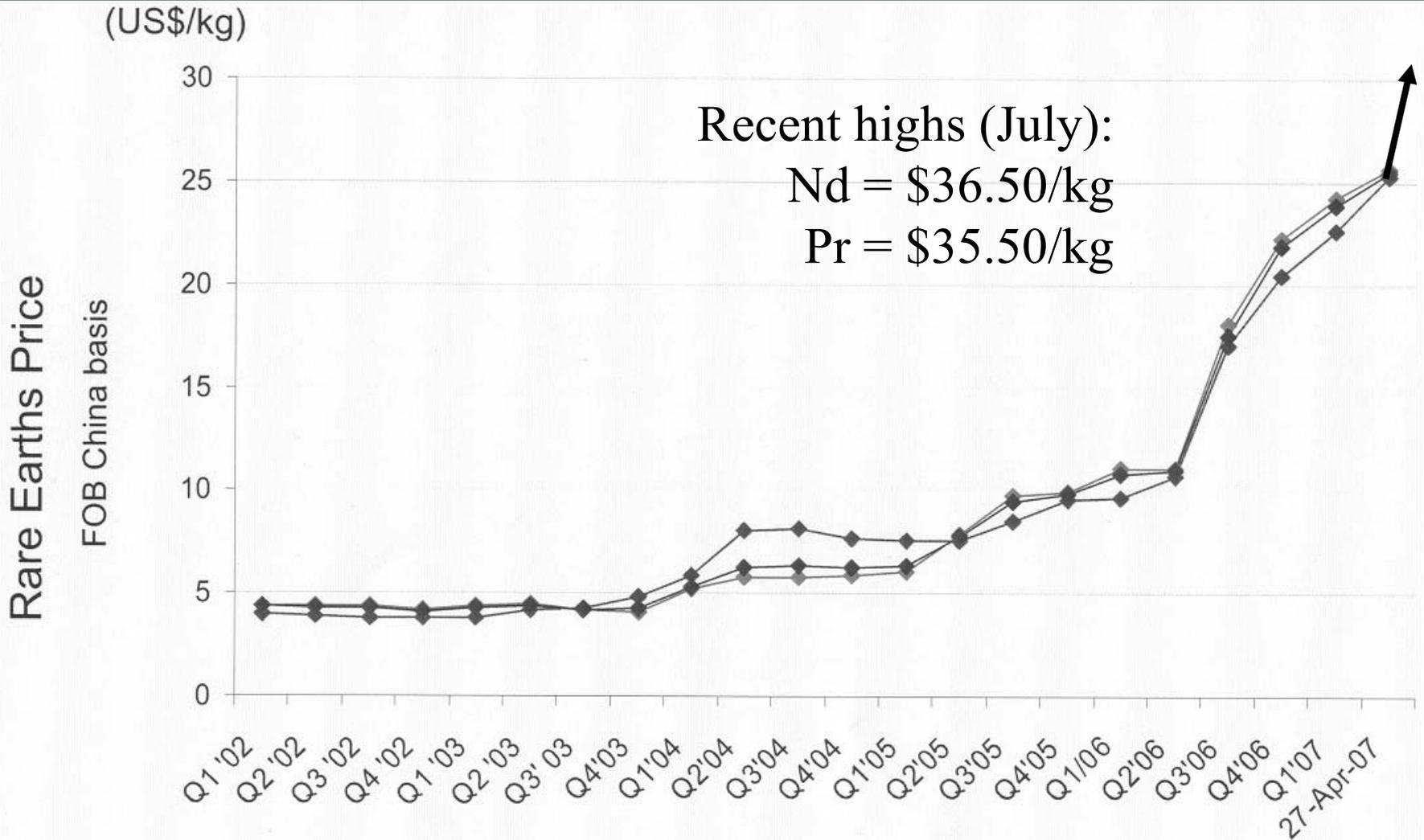
Prices are indicative, and basis FOB China

Metal Oxide	Principal Uses	Price US\$/kg
Lanthanum Oxide 99% min	Batteries, glass	3.90 – 4.00
Cerium Oxide 99% min	Catalytic converters, glass	3.60 – 3.70
Praseodymium Oxide 99% min	Magnets, electronics	33.00 – 33.20
Neodymium Oxide 99% min	HI permanent magnets	35.20 – 35.40
Samarium Oxide 99% min	Electronics, lasers	3.15 - 3.35
Europium Oxide 99% min	Television screens	330 - 350
Terbium Oxide 99% min	TV's, lighting, magnets	570 - 590
Dysprosium Oxide 99% min	Magnets, electronics	84 - 87
Gadolinium Oxide 99%min	Magnets, refrigeration?	9.40 - 9.50
Yttrium Oxide 99.999% min	Television screens, lasers	8.20 – 8.40



LREE PRICE TRENDS

Neodymium & Praseodymium



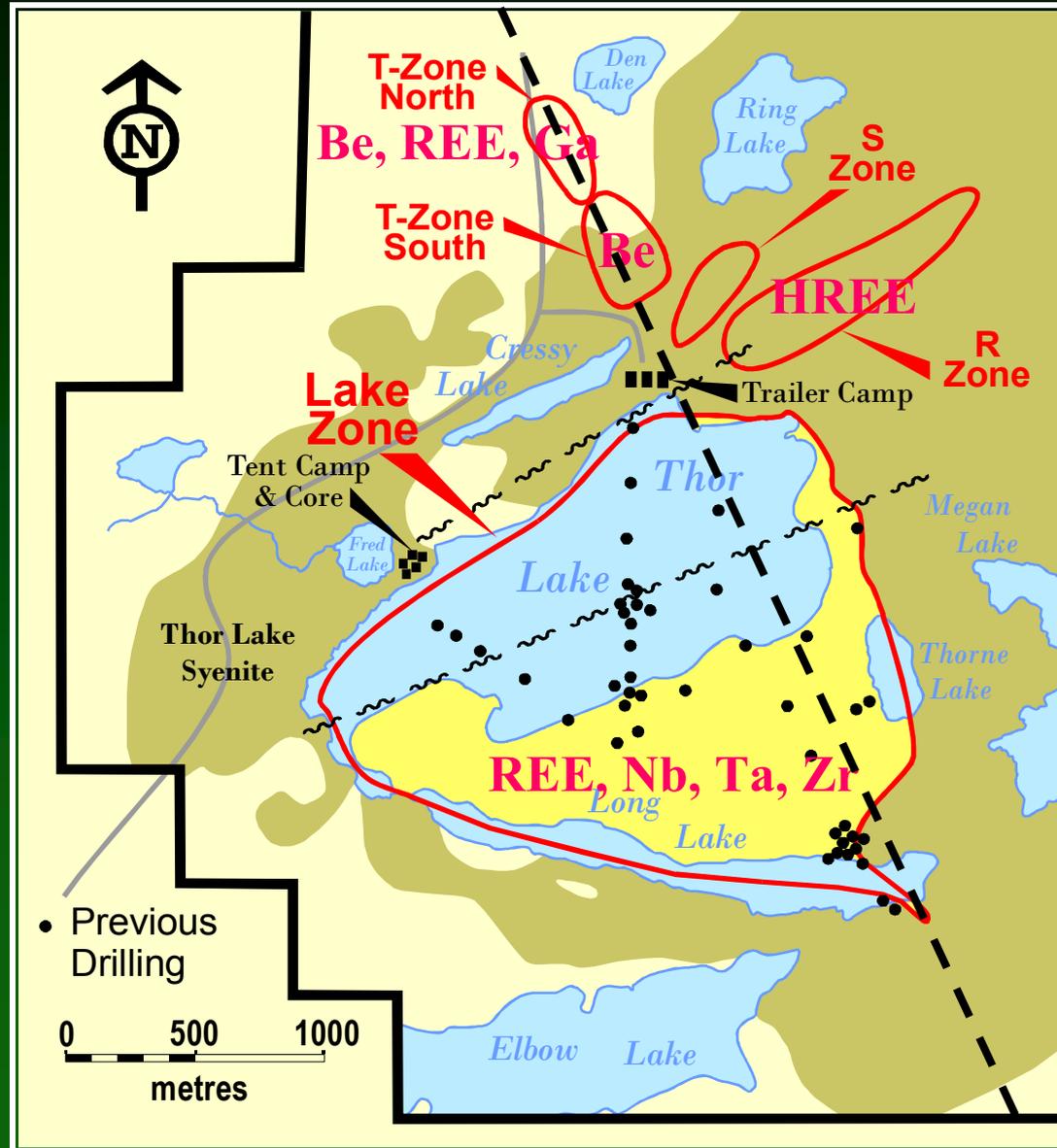


Thor Lake REE Project Location





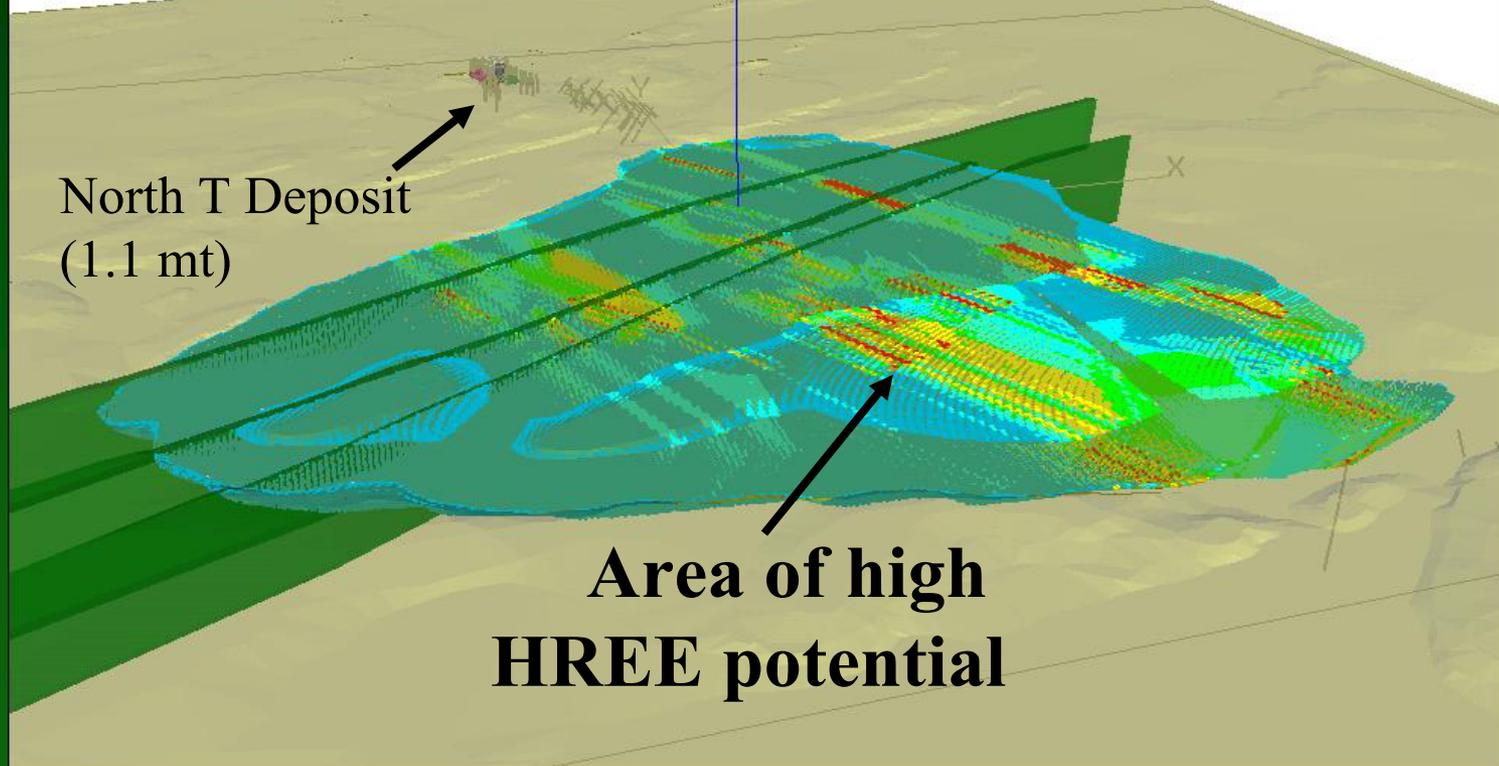
Rare Metal Zones





Lake Zone REE-Ta-Nb-Zr Deposit 43-101 Inferred Mineral Resources

CUTOFF%	TONNES	Y2O3+TREO %	Ta2O5 %	Nb2O5 %	ZrO%
0.10 Y2O3	14,005,000	1.23	0.025	0.33	1.73
0.05 Y2O3	83,224,000	0.99	0.025	0.31	1.96
0.01 Y2O3	375,410,000	0.41	0.014	0.22	1.19



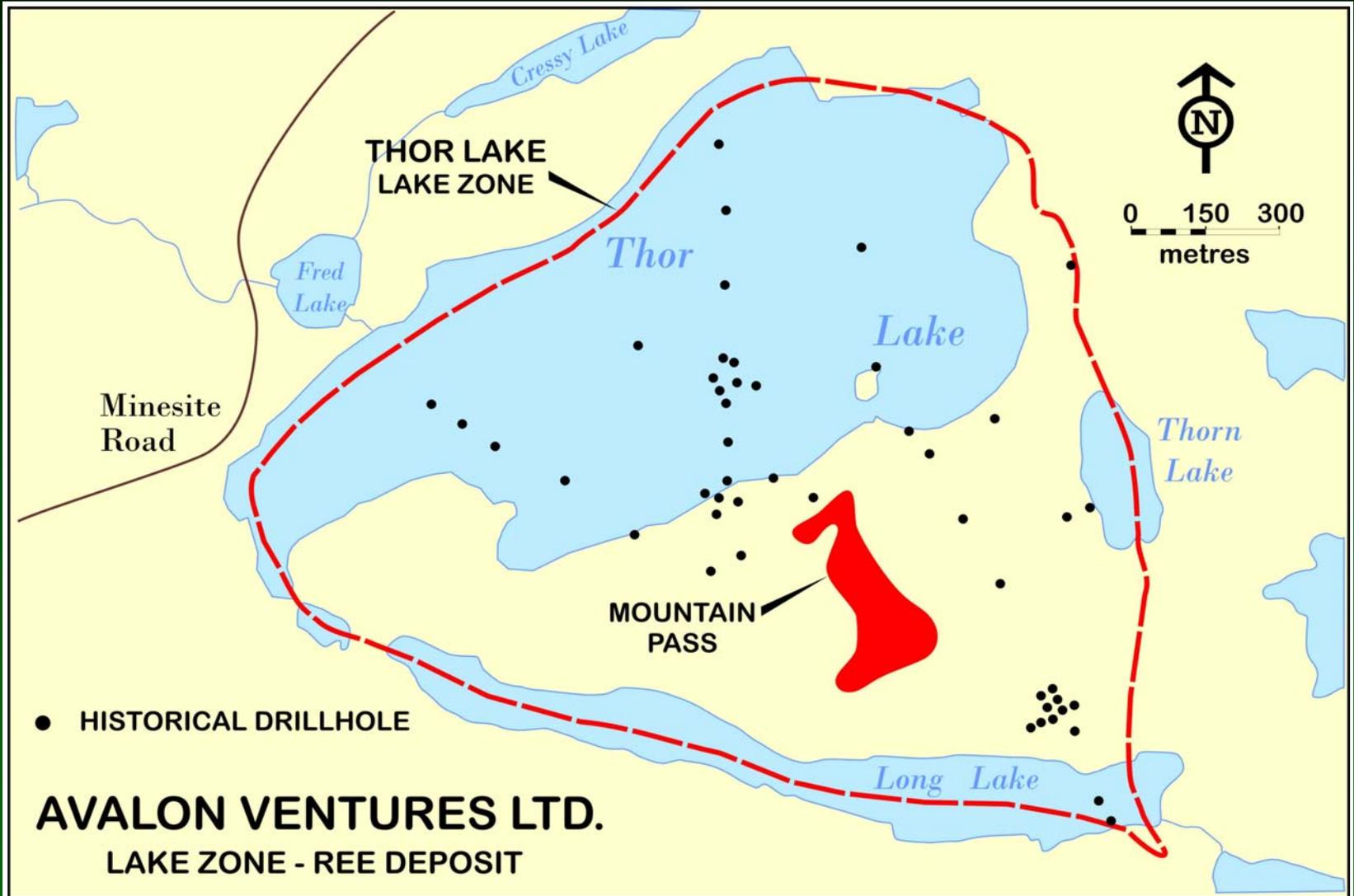


Global REE Deposit Comparison

Deposit Name	Size :Tonnes(T) or tons(t)	Grade % TREO	TPY TREO Production	Comments
Bayan Obo	600 million t	5% (10% rec. = 0.5%)	46,000	LREE, Bastnaesite By-product of iron
S. China Ionic clays	Very large	0.1%	7,000	HREE, environmental Issues (major)
Sichuan, Mianning	17 million T	3.0%	31,000	LREE, Bastnaesite
Mtn. Pass	20 million t	9.3%	5,000	LREE, Bastnaesite
Mt. Weld	7.7 million T	12%	10,000	LREE, monazite
Nolan's Bore	18.6 million T	3.1%	10,000	LREE, apatite
Alkane	35.7 million T	0.75%	1,200	LREE, by-product
Hoidas Lake	1.52 million T	2.8%	3,000	LREE, allanite, apatite
Lake Zone	375 million T 83.2 million T 14 million T	0.41% 0.99% 1.23%	1,000- 2,000	HREE +LREE, fergusonite, Allanite, high-grade Sub-zones present

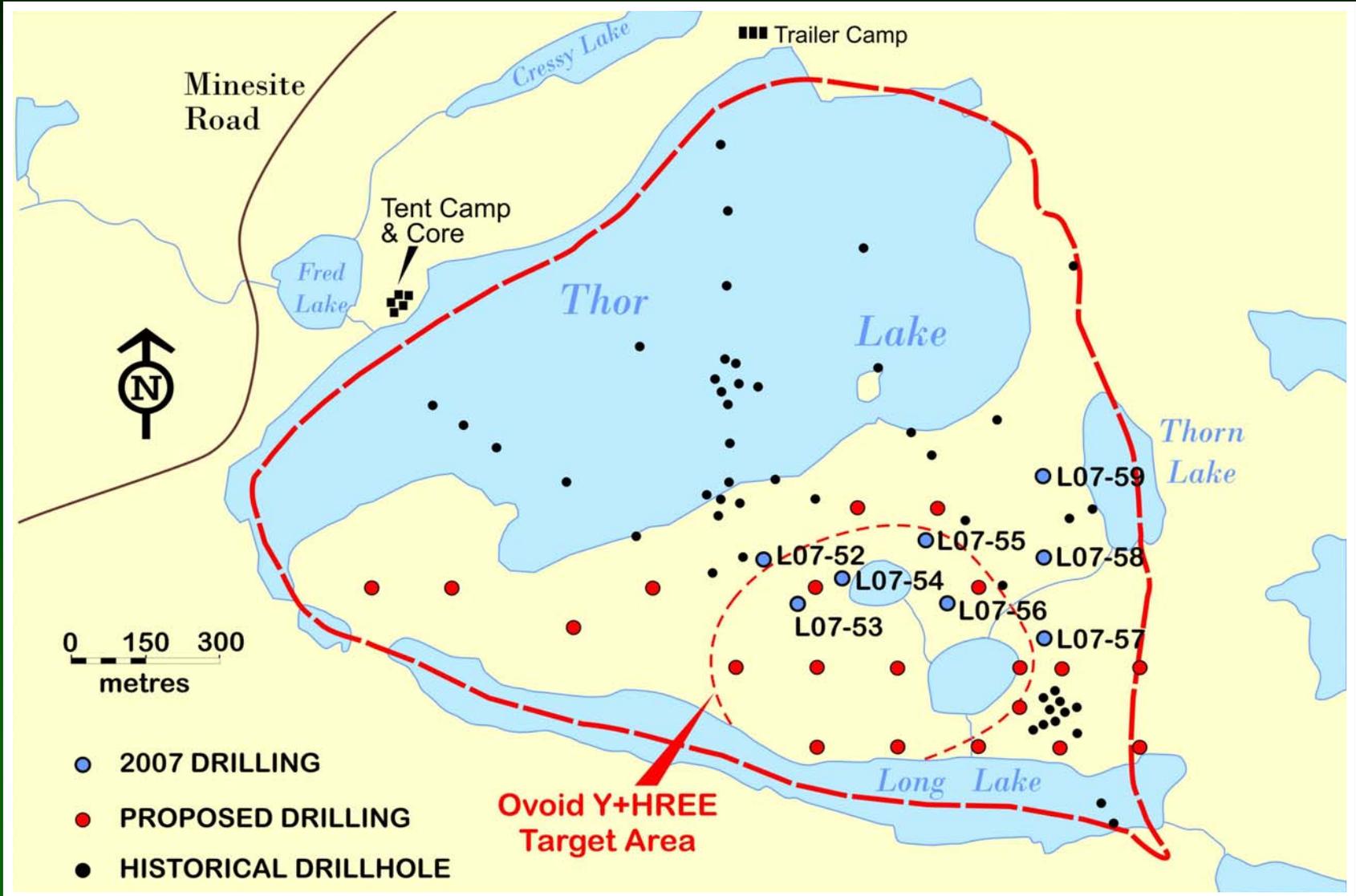


Lake Zone Size Comparison with Mountain Pass deposit, CA





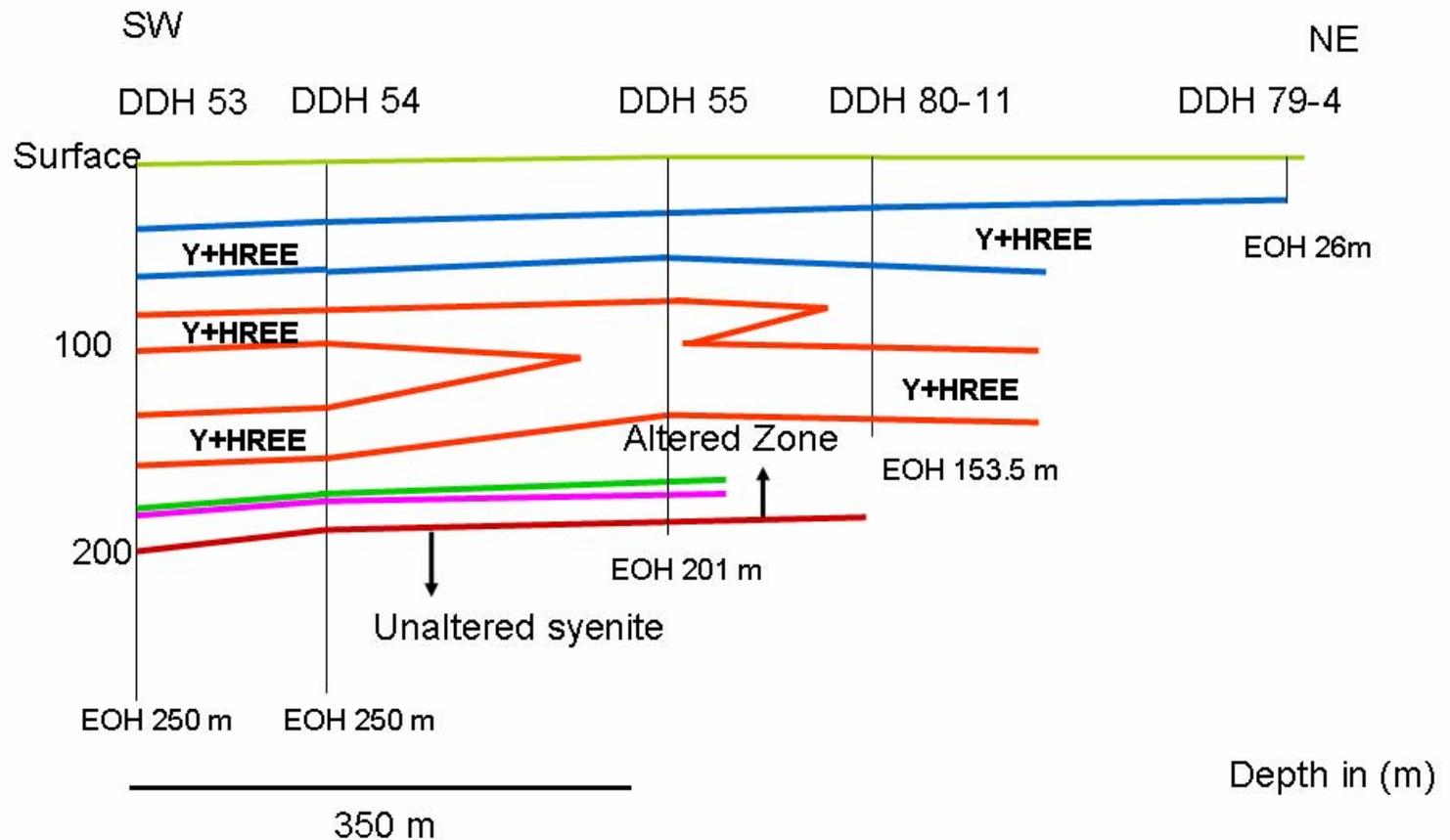
Lake Zone 2007 Drilling Program





Lake Zone: Preliminary Interpretation

Drill section (looking north)





Lake Zone REE Deposit: Key Points

- **Very large near surface resource**
 - 375.4 million tonne inferred resource (43-101)
 - Flat-lying body, 150m thick and 1200m across
 - Amenable to shallow open pit mining or by decline
- **Exceptional Quality REE mineralization**
 - Contained largely in Fergusonite a Y-Nb-Ta oxide mineral enriched in the high demand, most valuable REE's: Neodymium, Europium, Terbium, Dysprosium
 - No associated thorium to create radioactivity issue with concentrates
 - Potential niobium, tantalum and zirconium by-products



LAKE ZONE REE DEPOSIT

Other potential rare metals products

- Tantalum
- Niobium
- Zirconium
- Hafnium
- Gallium
- Polylithionite mica (lithium)
- ?????



THOR LAKE :

The Sudbury of Rare Metals deposits?

It wasn't until materials scientists invented stainless steel that a large volume market for nickel was created



The world is watching...





CORPORATE INFORMATION

H.O. #1901-130 Adelaide St. W. Toronto, ON

September 20, 2007

TSX Venture: AVL

NASD: AVVTF

SEG 12g3-2(b) No.82-4427

Shares Outstanding

52,058,123

Fully Diluted

57,667,248

Market Capitalization

C\$100 million (F.D. @ \$1.80)

Recent Price Range

C\$ 1.70 - \$ 2.00

52 Week High / Low

C\$ 2.34 - \$ 0.70

All-Time High

C\$ 3.45 (October, 1997)

Cash Resources

C\$ 2.0 million

Management Position

3,384,500 shares (6.7%)

Active Projects

7 (5 Rare Metals, 2 Copper-Gold)

Balance Sheet Assets

\$ 9.1 million (31/05/07)