

Industry Bulletin: Rare Metals there with the launch of the iPhone3G®

In our ongoing efforts to provide you with broader communications and industry information, we are pleased to issue another Industry Bulletin discussing recent trends in the markets of various rare and strategic metals. This edition looks at the key role of rare metals in enabling this week's launch of the Apple iPhone 3G®.

There were long line-ups across 21 countries in North America and Europe on Friday, July 11th, and media headlines around the world, as millions of units flew off the shelves, when Apple released its new iPhone 3G®. As Simon Avery and Matt Hartley reported in this weekend's Globe and Mail (July 12) under the tag line "iQuake", "Customers will never go back to where they were before this week. The smart phone will soon surpass the PC in popularity, and rewrite the rules of telecommunications".



This long-awaited consumer product has remarkable graphics and a multiplicity of functions: an iPod, easy access to the Internet, photo management and camera capabilities, GPS, and yes – a phone....all enabled by rare metals.

Apple also takes pride that the iPhone 3G® embodies many features to reduce its environmental impact, including:

- PVC-free handset, headphones and USB cable
- Bromine-free printed circuit boards, Mercury-free LCD display
- Majority of packaging made from post-consumer recycled fiberboard and bio-based materials
- Power adapter outperforms strictest global energy efficiency standards

<http://www.apple.com/iphone/specs.html>

Rare Metals were quietly there at the launch, unseen but integrated into many of the components used to enable various iPhone functions.

One should find **indium** in the touch-screen and solders, **gallium** and/or **germanium** in the chips, **tantalum** in the capacitors, **neodymium** magnets in the voice coils, disk drive and earphones, **beryllium**- copper in the connectors, **rare earth phosphors** that bring

Industry Bulletin: iPhone – 12July08

the screen colours to light, and **zirconium** ceramics in its audio circuits. The rechargeable battery is a **lithium** ion design.

Rare Earths have also been integral in cell phone technology in earlier editions in the speaker/receiver for talking and ring tones, and the vibration motor for courtesy mode. In flip phones, **rare earth magnets** are used in the sensors that detect when the phone is opened or closed and automatically switch the LCD screen On/Off to reduce drain on the battery.

Avalon is well positioned to benefit from this most recent new demand for rare metals from the consumer electronics industry through the development of its large rare metals resources at the Thor Lake deposit in the Northwest Territories, where a \$5.0 million work program is now underway.

If you have any comments or questions, please do not hesitate to post them on Avalon's official investor relations hub at <http://www.agoracom.com/ir/Avalon>.

Regards,

AGORACOM Investor Relations