



Brazil Lake Lithium and Rare Earth Metals Project (One of the Highest Grade Lithium Deposits in North America)

VANCOUVER, British Columbia – February 10, 2010 – **PETRO HORIZON ENERGY CORP.** ([TSXV.PHE](#)) ([PRZCF.OTCBB](#)) ([PH0.FRANKFURT](#)), is pleased to announce that the Company has executed a Letter of Intent (“LOI”), dated February 5th, 2010, with Champlain Mineral Ventures Ltd (“Champlain”), a private Nova Scotia based corporation, to earn up to a 75% undivided ownership interest in the Brazil Lake Lithium Rare Earth Property (“Property”) in southern Nova Scotia.

BRAZIL LAKE PROPERTY (Lithium and Rare Earths Metals)

The Property consists of two exploration licenses having 36 claims and 43 claims respectively covering 3,160 acres. It is located approximately 30 Kilometers north of Yarmouth, Nova Scotia and 12 kilometers west of the Avalon Rare Metals (AVL) East Kemptville Project - Exploration to date on the Property has successfully revealed two of the richest Lithium bearing pegmatite dikes in North America, in addition to a host other rare earth metals such as tantalum, niobium, beryllium, tungsten tin and rubidium. Other potential economic targets include cosmetic grade mica, silica chloride, aluminum chloride and rubidium enriched potassium feldspar. The Property is accessible by nearby paved roads on the east and west with an all weather cross road. Power lines are also accessible from the paved roads and within one kilometer of the pegmatites.

The primary exploration and development target on the Property has been Lithium which is found in the pegmatites. The pegmatite found at Brazil Lake is enriched in rare-metal –elements including lithium, rubidium, beryllium, tantalum and tungsten and it is at present the only known occurrence of its type in Nova Scotia. Champlain’s drilling results to date have identified two lithium and rare earth metal bearing pegmatite dikes that appear at surface and are up to 20 meters wide and having exposed lengths up to 300 meters long. The deepest drill hole intersected the dikes at 50 meters depth. Both pegmatites remain open at depth and future drilling will attempt to extend the depth of the dikes to 100 or 150 meters. Three other potential pegmatites have been indicated through geochemical surveys. Further geochem surveys, exploration and subsequent drilling are planned to define other pegmatite dikes on the property indicated by pegmatite float fields.

Lithium on the property is hosted by the mineral spodumene which makes up approximately 14 to 20% of the pegmatites. Lithium bearing spodumene crystals up to one meter in length were initially discovered in the south pegmatite. The maximum lithium oxide (Li₂O) content in the spodumene is approximately 7.4% to 7.7% making it one of the highest grade lithium discoveries in North America.

In 2003 a 50 ton bulk sample was extracted from the South pegmatite and crushed at a local aggregate quarry. A portion of the crushed pegmatite processed through a pilot plant at Dalhousie University via flotation was to separate the spodumene, mica and feldspars. The process was very successful. Further metallurgical studies will also focus on separating the potassium and sodium feldspars. The potassium feldspar is also a very valuable byproduct, due its enrichment in rubidium, and is used in ceramic, glass and porcelain industries as it lowers the melting temperature making these products easier to work and cheaper to process. Part of the company's overall plan will be for the Company to build and implement a Pilot plant once definition drilling is completed. Approximately \$1,000,000 has been spent by Champlain and associates on exploration and metallurgy to date.

ABOUT LITHIUM

According to a recent article in the National post dated Thursday January 21 2010 Overall demand for lithium is increasing at an annual rate of 7 per cent; demand for the mineral is increasing 35 per cent annually for use in batteries. This is driven by automakers moving toward electrifying their vehicles to meet the rigid emissions standards set by governments around the globe.

AGREEMENT

Whereas the LOI is to be replaced with a definitive option and joint venture agreement ("Agreement"), subsequent to completion of due diligence, key terms of the Agreement include:

- Minimum work commitments of \$2,000,000 over the next three years with a minimum of \$500,000 in the first year,
- \$200,000 in cash option payments over the next three years, including \$10,000 on execution of the LOI, \$10,000 upon completion of Due Diligence and \$40,000 at the end of the first year.
- Upon completion of the work programs in the first and second year, a minimum of \$1,200,000 and payment of the option payments, PHE will have earned a 37.5% undivided ownership interest.
- Upon completion of the third year work program of a minimum of \$800,000, PHE will have earned an additional 22.5%, thus increasing its undivided ownership interest to 60%.
- Upon delivery of a Bankable Feasibility Study, PHE will have earned an additional 15%, thus increasing its undivided ownership position to 75%.

- Completion of the Agreement is subject to the approval of the TSX Venture Exchange.
- A Finder's fee will be payable in accordance with TSX. Venture Exchange policy and guidelines.

On Behalf of the board of directors,

"Ron Bourgeois"

Ron Bourgeois, President

FOLLOW US ON:

[FACEBOOK](#) [TWITTER](#) [MYSFACE](#)

[LITHIUM NOTES](#)

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Suite 1710 – 1040 West Georgia Street Vancouver, B.C., V6E 4H1

For further information: Petro Horizon Energy Corp, Vancouver, BC,

Tel: (604) 488-3900, email: info@petrohorizonenergy.ca