NEVADA
ENERGY METALS

TSX-V: **BFF**
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Clayton Valley BFF-1 Lithium Project

Nevada Energy Metals Inc. (BFF) is focused on locating commercially important saline groundwater deposits enriched in dissolved lithium. In Nevada, Nevada Energy Metals hold four lithium exploration prospects with unexplored potential for Lithium brine production namely: the BFF-1 project in Clayton Valley, The Teels Marsh West project, the San Emidio Desert Projects and the earn-in joint venture with Dajin Resources Corp. at Alkali Lake, which adjoins Clayton Valley.

All producing lithium brine deposits share a number of first-order characteristics: (1) arid climate; (2) closed basin containing a playa or salar; (3) tectonically driven subsidence; (4) associated igneous or geothermal activity; (5) suitable lithium source-rocks; (6) one or more adequate aquifers; and (7) sufficient time to concentrate a brine.

At the Clayton Valley deposit of Albemarle (NYSE: ALB) brine, typically carrying 200–1,400 milligrams per liter (mg/l) Li, is pumped to the surface and concentrated by evaporation in a succession of artificial ponds, each one in the chain having a greater Li concentration (Garrett, 2004). After a few months to about a year, depending on climate, a concentrate of 1 to 2 percent Li is further processed at a chemical plant to yield various end products, such as lithium carbonate and lithium metal.

Circumstantial evidence from Clayton Valley suggests that felsic vitric tuffs are a particularly favorable primary source (Price and others, 2000). Another potentially important lithium source in Clayton Valley is uplifted Neogene lake beds from earlier in the basin's history, which had previously been hydrothermally altered to hectorite (see also Kunasz, 1974). Lithium is highly soluble and does not readily produce evaporite minerals when concentrated by evaporation. Instead it ends up in residual brines in the shallow subsurface. At Clayton Valley, brines are pumped from six gently dipping aquifers that are variously composed of ash, fanglomerate, tufa, and halite (Zampirro, 2004).

The general structure of the producing area of the north part of the Clayton Valley basin is known from geophysical surveys and drilling to be a graben structure with its most down-dropped portion the east-northeast side of the basin along the extension of the Paymaster Canyon Fault and Angel Island Fault (Zampirro, 2004).

A similar graben structure has been identified on ground recently acquired by Nevada energy Metals in the north part of the Clayton Valley basin. The Goat Island graben is inferred from gravity inversion (Quantec, 2008; Petrick, 2008); the valley is segmented into a northerly-trending, 1-2 km-wide sub-basin with a distinct escarpment on each side caused by the displacement of a block of land downward.

Within the graben and within the boundary of the claim block, a drill hole by Western Geothermal Partners 2007 logged as WGP#2 reported as follows: *"From 280 - to 305 ft., fine grained green sand and silt logged as volcanic ash was encountered. This unit may be correlative to the Main Ash Aquifer, which is a marker bed in other areas of the Clayton Valley Basin."*

Nevada Energy Metals is planning a detailed exploration program on the Clayton Valley/ Silver Peak property this summer.

The technical information has been prepared in accordance with the Canadian regulatory requirements of National Instrument 43-101 and has been reviewed and approved on behalf of Nevada Energy Metals Inc. by Alan Morris, P.Geo, a Qualified Person.

Nevada Energy Metals
1220-789 West Pender St. Vancouver, BC, V6C 1H1
604-428-5690 | info@nevadaem.com

nevadaenergymetals.com
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